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ATHLETIC TRAINING • Summer 1980
Dear N.A.T.A. Member:

I will look forward to seeing you in Philadelphia during our Annual Meeting and Clinical Symposium. Many thanks to District Two for putting together such an outstanding meeting.

I hope each state will continue its licensure effort. This still remains one of our most important goals and we must continue to work toward this goal. This year we received an endorsement supporting the concept of licensure for the Athletic Trainers from the American College Health Association. By contacting local members of this organization you may be able to gain additional support and help in your licensure efforts.

In March I had the opportunity to spend two weeks in Australia as guest of the Australian Sports Medicine Federation. I was involved in a lecture series dealing with the management of athletic injuries and taping techniques. I found that athletic training in Australia is somewhat different. The people in sports medicine are very interested in the way we do things. Also, there was a lot of interest in N.A.T.A. as a source for helping to improve their techniques as well as to help in starting their own Athletic Trainer organizations. My trip was exciting and rewarding and I feel very fortunate to have been given the opportunity to share ideas and talk about NATA to the Australians.

This past year we were saddened by the deaths of several of our members. All of us have a sense of personal loss each time one of our members dies; however, the real concern with regard to death is not with those who have gone on, but rests with those of us who are left there to carry on. Faith and confidence can change your fear to hope, and your disappointment to joy.

Best wishes to each of you. Please continue to let your officers know how we can best serve you and our association.

Cordially,

William H. Chambers
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Editor's Remarks

Ken Wolfert, ATC
Miami University

NO EXCUSE . . .

Please pardon the abnormal delay between the Winter and Spring issues. We hope to have the major production problems corrected and in the future you should expect to receive your quarterly issues of the Journal as follows:

Fall    Sept. 15    Spring    March 15
Winter    Dec. 15    Summer    June 1

JOURNAL SURVEY . . .

Speaking of getting things in on time, those of you who received one be sure to fill out and return the Journal Survey Questionnaire as soon as possible. We hope to have as high a response as can be. Just take a moment and answer those few questions and it back. Thanks. Our apologies if you received the questionnaire before your journal.

A SAD NOTE . . .

We were saddened to learn of the passing of such a devoted friend of the NATA as was Bud Miller. His efforts and concerns for the betterment of our profession as well as all those other devoted and highly respected members who have also passed away recently will be felt by us for a long time to come.

SUMMERTIME . . .

We hope you are able to enjoy the 31st Annual Meeting and Clinical Symposium June 8-11 in Philadelphia. If you have the opportunity, make the most of those summer workshops because more and more people are counting on the benefits all the time. Finally, most of us can look forward now to some of the upcoming time we have to reflect on what next year will bring.

EDITORIAL COMMENT . . .

Here is a unique story of a small town's efforts to reach the high school athlete in the rural communities.

For the past ten years Edward Grogg, MD, a pathologist, has been the team physician for the Mahomet-Seymour High School athletic teams in Mahomet, III., which is ten miles from Champaign/Urbana. His concern for the prevention of injuries and the lack of adequate health care at so many smaller size schools caused him to set up his own free clinic. Dr. Grogg started things off with ambitious fund raising activities that were highlighted by a $10,000 donation of his own, a double wide mobile trailer which he had moved onto school land and is currently used as the home base of operation, a $17,000 van used as a mobile evaluation and treatment facility, and sixteen pieces of strength training equipment. Finally on June 1, 1979, the Center For Athletic Injury Research (CAIR) opened. The Mahomet-Seymour Board of Education has endorsed Dr. Grogg's proposal to build a permanent home for this center on the grounds of the high school near the new football field. Dr. Grogg is presently trying to seek $100,000 in matching funds to construct this 8,500 square foot center. He hopes to gain support in the form of Federal grants in the near future to match the $40,000 in cash on hand so far. The total assets of CAIR is about $100,000 now when figuring on contributions in services and goods.

In the first year of operation, CAIR has been very successful. The modular home center has treated nearly 200 athletes from as far away as 100 miles. The Center's van has visited 28 schools this past fall and the plans are to extend these visits and services within a 100 mile radius of Mahomet.

To help Dr. Grogg with all the work that takes place, he has lined up a non-paid staff including "Skip" Pickering, head athletic trainer and Casey Clarke, Dean of the College of Applied Life Studies; both of whom are at the University of Illinois.

There could hardly be a more noble enterprise related to prep athletics. The new center for athletic injury research (CAIR) will not only provide facilities and supervision for Mahomet-Seymour athletes but also has an announced goal of becoming available to athletes from surrounding communities, provide care for stroke victims, handicapped children and those in need of rehabilitation.

Dr. Grogg is setting up a not-for-profit, tax-exempt corporation, and has formulated the following goals:

1. Research. The development of a flexibility and a weight training center for supervised training of high school athletes and evaluation of such training in the reduction of both rate and severity of injuries. The initial research program will involve the entire football team of Mahomet-Seymour.

2. Institution of NAIRS (National Athletic Injury-Illness Reporting System) at all schools in the Conference Mahomet-Seymour participates in to maintain complete records for comparison purposes.

3. Development of a high school curriculum with credit for the purpose of training student trainers. The course will be part of the health curriculum. The plan is to have student trainers available at all Mahomet Seymour events, both male and female.

4. The development of a complete rehabilitation center. It will be available to any injured athlete in the area, free of charge. Grogg plans to acquire whirlpool, ultra-sound and deep heat equipment.

5. Continuing education and service to the surrounding area with involvement and active participation in the annual Sportsmedicine Seminar sponsored by Carle Clinic and the Carle Foundation located in Urbana, Illinois.

6. Development of a visiting training facility and team physician call system to serve small schools in the surrounding area.

It is refreshing to see an effort such as this. Dr. Grogg certainly deserves our praise and enthusiasm.

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Letter to the Editor

To the Editor:

After reading the article by Mr. Bruce Johnson on the treatment and rehabilitation of a complete acromioclavicular separation, I should like to make two comments. One, the Varney brace does not work as well as the Kenny-Howard apparatus and two, the x-ray showing the unreduced acromioclavicular separation with the Varney brace I think is unfortunate. I have not yet seen a third degree separation that I saw within a matter of a few days that I could not reduce completely with a Kenny-Howard apparatus.

One of the big problems in acromioclavicular injuries is that the coracoclavicular ligaments sometimes calcify and this may present a problem inasmuch as the clavicle rotates as the arm is abducted and adducted. Calcifications of the coraco-clavicular ligaments will interfere with this. The article does not show a late film of the individual following the removal of the screw at, say, twelve months post-surgery and injury. It would be very interesting to see what that patient's coraco-clavicular ligaments look like.

G. Thomas Samartino, MD
South Miami, Florida

Mr. Johnson Replies: There are some orthopedists who favor the Varney Brace over the Kenny-Howard Sling for any number of reasons, if not for comfort alone. That point is simply a matter of opinion. From the orthopedists I have spoken to, they too feel that conservative treatment should be attempted if at all possible, however, for athletes where there are serious doubts as to the stability of the AC joint once competition is resumed. It would be very interesting to see statistics regarding complete AC sprains in athletes with conservative treatment. Unfortunately, I do not have access to a late film of the subject to determine the amount of calcification of the coracoclavicular ligaments. I have, through correspondence with the subject, been assured that range of motion is unrestricted and painless although he states that barometric pressure changes are noticeable in the joint. From my understanding, the coracoclavicular ligaments calcify to a certain degree in 50-60% of complete AC sprains but this should not necessarily mean problems with abduction and adduction unless calcification is extensive.
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June, 1980

6-8 Weekend Cardiac Rehabilitation Seminar, Williamsburg, Virginia. Contact Philip K. Wilson, Executive Director, LaCrosse Exercise Program, Mitchell Hall, University of Wisconsin-LaCrosse, LaCrosse, Wisconsin 54601.

8-11 31st Annual National Athletic Trainers Association Meeting, Sheraton Hotel, Philadelphia, Pennsylvania. Contact NATA, P.O. Box 1865, Greenville, North Carolina 27834.

9-13 Sports Medicine I, United States Sports Academy, Mobile, Alabama. Contact United States Sports Academy, P.O. Box 8650, 124 University Blvd., Mobile, Alabama 36608.

12-14 Facilex-Athletic and Recreational Facilities Exposition, Las Vegas, Nevada. Contact Golden Gate Enterprises, Inc., 1307 So. Mary Avenue, Sunnyvale, California 94087.


16-20 Sports Medicine II, United States Sports Academy, Mobile, Alabama. Contact United States Sports Academy, P.O. Box 8650, 124 University Blvd., Mobile Alabama 36608.

16-27 Cardiac Rehabilitation 1-2 Week Workshop, LaCrosse, Wisconsin. Contact Philip K. Wilson, Executive Director, LaCrosse Exercise Program, Mitchell Hall, University of Wisconsin-LaCrosse, LaCrosse, Wisconsin 54601.

July, 1980

3 The Runners Seminar, Atlanta Georgia. Contact Sports Medicine Education Institute, Suite 400, 20 Linden Avenue NE, Atlanta, Georgia 30308.

6-11 American Dance Festival’s National Body Therapy Workshop, Durham, North Carolina. Contact Jean K. Danser, Body Therapy Workshop, American Dance Festival, P.O. Box 6097, College Station, Durham, North Carolina 27708.

7-11 5th Annual Sports Medicine Conference, Hattiesburg, Mississippi. Contact Jim Gallaspy, ATC, Box 8461 Southern Station, Hattiesburg, Mississippi 39401.

7-25 Cardiac Rehabilitation 1-2 Week Workshop, LaCrosse, Wisconsin. Contact Philip K. Wilson, Executive Director, LaCrosse Exercise Program, Mitchell Hall, University of Wisconsin-LaCrosse, LaCrosse, Wisconsin 54601.

11-15 Athletic Training Workshop, Castleton, Vermont. Contact John Cattone, Director of Athletic Training, Castleton State College, Castleton, Vermont 05441.


14-16 Student Trainer Workshop, Hattiesburg, Mississippi. Contact Jim Gallaspy, ATC, P.O. Box 8461 Southern Station, Hattiesburg, Mississippi 39401.

14-18 4th Annual Sports Medicine Workshop, Orlando, Florida. Contact Ronald F. Ribaric, ATC, Head Athletic
Trainer, University of Central Florida, Orlando, Florida 32816.

14-18 American Corrective Therapy Association Conference, Boston, Massachusetts. Contact Edward F. McCormack, 214 Pearl Street, Brockton, Massachusetts 02401.

14-25 Cardiac Rehabilitation 102 Week Workshop, LaCrosse, Wisconsin. Contact Philip K. Wilson, Executive Director, LaCrosse Exercise Program, Mitchell Hall, University of Wisconsin-LaCrosse, LaCrosse, Wisconsin 54601.


21-25 Athletic Training Review Seminar, Chicago, Illinois. Contact Marianne Porter, Center for Sports Medicine, Northwestern University Medical School, 303 E. Chicago Avenue, Chicago, Illinois 60611.


28-Aug. 1 Northeast Louisiana University Athletic Training Workshop, Monroe, Louisiana. Contact Dr. Bill Daniel, Department of HPE, Northeast Louisiana University, Monroe Louisiana 71209.

August, 1980

1-3 Weekend Cardiac Rehabilitation Seminar, Hershey, Pennsylvania. Contact Philip K. Wilson, Executive Director, LaCrosse, Exercise Program, Mitchell Hall, University of Wisconsin-LaCrosse, LaCrosse, Wisconsin 54601.

15-17 Weekend Cardiac Rehabilitation Seminar, Lake Geneva, Wisconsin. Contact Philip K. Wilson, Executive Director, LaCrosse Exercise Program, Mitchell Hall, University of Wisconsin-LaCrosse, LaCrosse, Wisconsin 54601.

29-31 Seminar on Health and Fitness, Portsmouth, New Hampshire. Contact John Hoell, M.D., Department of Medicine, Milford-Whitinsville Regional Hospital, 14 Prospect Street, Milford, Maine 01757.

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Announcements

Survey Results Bring About New Association Benefits

The results of the independent survey conducted to determine the members' interests in fringe benefits have indicated that the Association should provide supplemental benefits for the members. With the high cost of living and rising inflation, the need for group benefits at reduced rates is becoming more and more apparent if families are to maintain their accustomed standard of living.

The Association is also aware that in many instances the members are not eligible for the benefits that are provided by the schools for tenured professors and teachers. This supplemental program will help the members fill those gaps in his or her insurance program.

The Insurance for National Associations Trust will provide the benefit package beginning with group term life insurance in early summer. The initial program will enable you and/or your spouse to obtain up to $50,000 of term life insurance protection at highly competitive rates.

The I.N.A. Trust was selected because it will offer a number of attractive benefits in the months to come and is capable of handling the anticipated growth of NATA in the future. I.N.A. was selected among many companies as offering the best association package for NATA's current size and needs. Presently, I.N.A. also insures the American Dental Association as one of its larger association groups.

It pleases us that you responded so favorably to the survey and that we are now able to extend to you even more benefits through your NATA membership. You will be receiving additional information on how to apply for the term life protection in the mail.

Memorials

All news and supportive information regarding the death of one of our members should be sent to:

Jim Rudd
Athletic Department
Kansas State University
Manhattan, Kansas 66506

1980 Football Rule Changes

From the National Federation Press Service

The Football Rules Committee of the National Federation of State High School Associations met in Kansas City on January 5th and 6th and adopted several rules changes pertaining to protective player equipment, and strengthened a few other rules that affected the authority of the referee.

The most significant committee actions were these:

1. Authorized the use of knee braces that contained metal if properly covered with a minimum of 1/4 inch of slow-recovery foam rubber or an alternate material of the same minimum thickness and having similar physical properties.

2. Although the committee reiterated the prohibition

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of elbow, hand, wrist or forearm pads or braces made of hard or unyielding leather, plastic, metal or other hard substance in its final form (even though covered with a soft padding), it did not prohibit the use of soft, padded gloves made of an unabrasive material.

The National Federation is also reminding schools that all players will be required next season to wear NOCSAE (National Operating Committee on Standards for Athletic Equipment) certified helmets. This requirement was originally announced in 1974. Thus, schools have had six years to bring their inventory of helmets into compliance with the NOCSAE requirement.

These changes will be incorporated in the 1980 Football Rule Book, which is scheduled for a May release. It will govern high school football competition in 48 states and the District of Columbia.

Schedule of Future Sites and Dates

NATA Certification Examination
Revised: March 1980

REGIONAL
(All regional sites subject to a minimum of six candidates per site and limited to a maximum of thirty candidates.)

January 18, 1981
Eugene, Oregon
Saratoga California
Fort Worth, Texas
Tampa, Florida
Grosingers, New York
Valparaiso, Indiana
(EATA)
Lexington, Kentucky
(All sites subject to change)

Deadline for requesting application forms: October 15, 1980*
Deadline for returning applications: December 1, 1980*

March 15, 1981
Odesa, Texas
Tucson, Arizona
Oxford, Ohio
West Chester, Pennsylvania
Pullman, Washington
Lincoln, Nebraska
Raleigh, North Carolina
Bloomingron, Minn. —
overflow/alternate site
(3-21-81)
(All sites subject to change)

Deadline for requesting application forms: December 15, 1980*
Deadline for returning applications: February 1, 1981*

NATIONAL
June 7, 1981, National Convention Site: Fort Worth, Texas
(Subject to a maximum of 50 candidates — applications accepted in order of remittance — only 25 additional candidates accepted for written examinations — June and August applications are processed under the same deadlines)

August 2, 1981
Ann Arbor, Michigan
Saratoga, California
Cedar Falls, Iowa
State College,
Pennsylvania

Chattanooga, Tennessee
Eugene, Oregon
New Britain, Connecticut
Terre Haute, Indiana
West Chester,
Pennsylvania

Deadline for requesting application forms:
March 15, 1981*
Deadline for returning applications:
April 30, 1981*

(please indicate date you wish to take the exam when requesting application; also indicate the section under which you plan to apply: I-NATA Approved Curriculum, II-Apprenticeship, III-Special Consideration, IV-Physical Therapy)

NOTE: 1982 exam dates will approximate the 1981 dates and sites on a regional basis. The national exam will be at the site of the annual NATA convention with similar numerical limitations.

*All items must be received by the NATA Board of Certification Office by the specified deadline dates.

A Timely Reminder...

Your contributions and continuing support to the NATA Scholarship Fund are always welcome and are necessary so that the endowment goal of $500,000 can become a reality. Please remember that our program of financial assistance is a four-fold one that offers scholarships, loans, grants and part-time employment. Organizational support from the NATA to the Fund continues, but your individual contributions are vital to the Scholarship Fund’s ultimate success. All contributions are tax deductible. Won’t you consider now the importance of your participation in the NATA Scholarship Fund? Make your checks payable to Scholarship Program, and mail them to this address: William E. Newell, Purdue University Student Hospital, West Lafayette, Indiana 47907.

Brochure Requests
All requests for the brochure entitled “Careers in Athletic Training” should go to Charles O. Demers, ATC, Chairman, NATA Career Information Services, Athletic Department, Deerfield Academy, Deerfield, MA 01342. The cost of the brochure is 10¢ each.

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**Journal Deadlines**

In order to avoid confusion and delays for any contributions you have for the Journal the deadlines for various sections of the Journal are provided below.

Send any materials for any section of the Journal other than formal articles and “Calendar of Events” to:

Ken Wollert  
Miami University  
Oxford, OH 45056

This includes sections such as “Tips From the Field”, “Announcements”, “Case Studies”, “Letters to the Editor”, etc. The deadlines are:

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**Guide to Contributors**

_Athletic Training_, the Journal of the National Athletic Association, welcomes the submission of manuscripts which may be of interest to persons engaged in or concerned with the progress of the athletic training profession.

The following recommendations are offered to those submitting manuscripts:

1. Seven copies of the manuscript should be forwarded to the editor and each page typewritten on one side of 8½ x 11 inch plain paper, triple spaced with one inch margins.

2. Good quality color photography is acceptable for accompanying graphics but glossy black and white prints are preferred. Graphs, charts, or figures should be of good quality and clearly presented on white paper with black ink, in a form which will be legible if reduced for publication.

   All artwork to be reproduced should be submitted as black and white line art (either drawn with a Rapidograph [technical fountain pen] or a velox stat or PMT process) with NO tonal values, shading, washes, Zip-a-tone — type screen effects, etc. used.

   All artwork to be reproduced in black plus a second (or more colors) should be submitted as black and white line art (see above paragraph), with an Amberlith® or similar-type overlay employed for each area of additional color(s). Also, all areas of tonal value, shading, “washes”, etc. should also be supplied on a separate clear or frosted acetate or Amberlith® overlay. In addition, all areas to be screened (a per cent or tint of black or color) should be supplied on an Amberlith® overlay.

3. The list of references and citations should be in the following form: a) books: author, title, publisher with city and state of publication, year; b) articles: family names, initials and titles of all authors, title of article, journal title, with abbreviations accepted as per Index Medicus, volume, page, year. Citations in the text of the manuscript will take the form of a number in parenthesis, (7), directly after the reference or name of author being cited, indicating the number assigned to the citation in the bibliography.

4. In view of _The Copyright Revision Act of 1976_, effective January 1, 1978, all transmittal letters to the editor must contain the following language before manuscripts can be reviewed for possible publication: “In consideration of the _NATA_ taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns or otherwise conveys all copyright ownership, to the _NATA_ in the event that such work is published by the _NATA_.” We regret that transmittal letters not containing the foregoing language signed by all authors of the manuscript will necessitate return of the manuscript.

Manuscripts are accepted for publication with the understanding that they are original and have been submitted solely to _Athletic Training_. Materials taken from other sources, including text, illustrations, or tables, must be accompanied by a written statement from both the author and publisher giving _Athletic Training_ permission to reproduce the material. Photographs must be accompanied by a signed photograph release form. Accepted manuscripts become the property of the Journal. For permission to reproduce an article published in _Athletic Training_, send requests to the Editor-in-Chief.

Manuscripts must be sent to:

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Oklahoma State University  
Stillwater, Oklahoma 74074

Manuscripts must be sent to:

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East Lansing, Michigan 48824  
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The Editorial Board will then review each paper and work with authors to help prepare the papers for publication. Each is handled on an individual basis.

Deadline for “Calendar of Events”: Information on upcoming events should be sent to:

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5. Manuscripts are reviewed and edited to improve the effectiveness of communication between the author and the readers and to assist the author in a presentation compatible with the accepted style of _Athletic Training_. The initial review process takes from six to eight weeks. The time required to process a manuscript through all phases of review, revision, and editing, to final publication is usually six to eight months depending on the timeliness of the subject. The author accepts responsibility for any major corrections of the manuscript as suggested by the editor.

Galley proofs of accepted papers are sent to the author for corrections prior to publication. Reprints of the article may be ordered by the author at this time.

6. It is requested that submitting authors include a brief biographical sketch and acceptable black and white glossy photograph of themselves. Please refrain from putting paper clips on any photograph.

7. Unused manuscripts will be returned, when accompanied by a stamped, self-addressed envelope.

Address all manuscripts to:

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The elbow joint is classified as a hinge or ginglymus joint, formed by the articulations between the distal end of the humerus and the proximal end of the ulna and radius. A review of the anatomy of the elbow is essential when discussing injuries to the area. Keeping the basic anatomical structures clear in mind is often helpful in determining which structures are involved in injuries related to the elbow joint. Many times complaints can be localized and correlated with physical findings of specific areas of tenderness or defect. By being familiar with the anatomy, it is possible to make a reasonable diagnosis of the specific area of pathologic involvement. Many forces are involved in injuries to the elbow joint, and these forces are often related to the sports in which the participant is engaged at the time of injury. Gymnasts are often subjected to tremendous stresses to the elbow joint. If the elbow would be hit off balance or on the edge of a mat, sudden varus and valgus forces may result in significant injury to the elbow joint. The collision forces involved in football may result in similar types of injuries as well as other injuries of more significance due to additional forces that may be imparted by another player. It is important for the athletic trainer to be able to recognize elbow injuries since adequate treatment will promote healing and allow return to function. Inadequate treatment, on the other hand, may result in permanent disability to the athlete. Consideration must be given to the age of the athlete and to the different types of injuries that can occur. In the skeletally immature athlete it is of great importance to always be cognizant of the possibility of injuries to the epiphysis, or growth centers. The concern for most athletes by the time they reach college age over the possibility of an epiphysial type injury should be much less since the epiphysis normally would be closed at this age level.
Soft Tissue Injuries

These injuries may be either superficial which involve the skin and muscular tissues, or bursal, which involve the bursae about the elbow. Abrasions result from friction between the skin and the playing surface, and usually result in a loss of layers of the skin with production of a raw bleeding surface. The main problem with this is the possibility of infection and blood poisoning. Adequate treatment requires cleansing with removal of any foreign debris, the application of sterile, dry dressing material and perhaps a topical antibiotic ointment. It is essential to continue using dressings and to pad the elbow adequately for the athlete's return to active competition.

Contusions may involve either the muscles about the elbow, or the bursae tissue at the posterior aspect of the elbow, which is termed the olecranon process. Direct blows to the muscular area may result in deep bruising which will produce bleeding and subsequent stiffness of the elbow. If this is not treated properly and adequately, it may be possible to see the development of myositis ossificans. The initial treatment is ice and rest to the part.

After the danger of bleeding has diminished, the judicious use of local heat may be beneficial. Galvanic stimulation accompanied by ice or moist heat may help restore range of motion to the elbow joint. It should be noted, however, that the use of heat may not be indicated for a minimum of 48 hours or longer in this case.

It has been found that any forceful stretching of the elbow to gain range of motion only results in subsequent loss of motion that the athlete had already achieved. Therefore the use of any active assistive or passive stretching is not advocated. Active range of motion exercises are encouraged, and when the athlete begins to improve in range, a gradual resumption of activity would be permitted. Protective taping may be used before complete range has been restored to allow an athlete to return, particularly if the taping is restrictive enough to prevent the extremes of flexion and/or extension. The prevention of contusions to the elbow requires adequate padding about the joint, but deep contusions may occur in spite of all precautions.

Injuries to the olecranon bursa are quite common and are the result of direct blows to the tip of the elbow. This type of injury may either produce an acute hemorrhagic type of bursitis, or a more chronic form which is composed strictly of synovial bursal fluid. The main problem that will be seen with this type of injury aside from the pain and restriction of motion is the possibility of this bursal involvement becoming secondarily infected. Once immediate swelling is recognized in the olecranon area, the initiation of ice, rest and compression is essential. If the fluid level increases, aspiration of the bursa may be required by the team physician. Diffuse swelling over the proximal elbow may represent an interstitial type of swelling and aspiration will not be beneficial. This is treated initially with ice, elevation and compression, followed in approximately 36 hours by contrast baths and protective padding. Return to activity is allowed as the player regains range of motion and is able to perform the necessary skills adequately without any impairment or danger of further injury. The prevention of olecranon bursitis is maintained by the use of adequate padding over the elbow joint.

The deep soft tissue injuries include strains to the muscular tissue, sprains to the ligamentous structures and either compression or contusion to the neural structures, namely the ulnar and median nerves about the elbow.

Sprains

Acute sprains of the ligaments are usually a result of tension overload to the ligamentous system. Most commonly this may be the result of an acute dislocation or subluxation of the elbow joint. However, sudden valgus overload to the elbow may result in an isolated tear of the medial, or ulnar collateral ligament and has been most commonly reported in javelin throwers. When the acute failure of the ligament system occurs, the complications that may follow this are the result of instability of the joint, heterotrophic calcification in the adjacent soft tissues and limitation of motion. Early treatment requires, immediate reduction of any dislocation, splinting of the joint and protecting it from further stress. Occasionally, particularly in isolated ruptures of ligaments or in dislocations in which gross instability is present, surgical repair of the ligaments may be the treatment of continued overuse in the musculotendinous unit with ultimate failure or impairment of function. Acute ruptures occur when an overload is applied to the musculature about the elbow joint which results in failure of the muscle tendon unit, followed by tearing either from its tendinous attachment or within the substance of the muscle tendon junction itself. The most common types of injuries seen with this are ruptures of the flexor pronator muscle group from the olecranon process. The next most common injury is a rupture of the common extensor tendon over the lateral epicondyle. Occasionally a rupture of the biceps tendon occurs and rarely, a rupture of the triceps tendon from the olecranon process may be seen. Complications from the injuries are pain with loss of efficient function and eventual fibrosis of the involved tissues. If the tearing is significant, the best treatment may be early surgical repair. This is particularly true with a rupture of the biceps tendon and rupture of the flexor pronator muscles off of the medial epicondylar area. Occasionally, lateral ruptures may heal without discomfort and result in good return of function. Usually, however, these are associated with the formation of granulation tissue which causes pain. This will eventually require surgical correction with excision of the granulation tissue and resutting of the common extensor tendon to the adjacent tissue. Prevention of acute ruptures may be influenced by adequate training programs, adequate warm-ups, and avoidance of sudden excessive loading by the untrained athlete. This means a slow, continuous increase in the resumption of activity on the part of the athlete, particularly those that are involved in throwing or racquet sports.

Chronic overuse syndromes may result in continued pain in the flexor, pronator or extensor muscle groups. This results from micro tears in the muscle tendon unit. Along with this is seen things like the development of contractures, chronic pain syndromes, reduced function and, eventually, rupture of the muscle tendon unit as the result of this chronic degenerative process. The treatment of this condition is the early recognition of the beginning phases of the overuse syndrome when pain and restriction of motion is first demonstrated. Initially, ice, rest of the part and gradual active stretching followed by strengthening exercises may be beneficial. Later in the program the use of ultrasound of galvanic stimulation may also be beneficial in the reduction of the formation of scar tissue. Passive and active stretching may help reduce scar tissue which is already formed.

Gradual resumption of activities should be paramount in the rehabilitation of the athlete suffering from any overuse syndrome. Prevention of problems related to this lie in the early recognition of the problem, reduction of activities, and a closely supervised rehabilitation program, with a very gradual increase in the intensity and duration of training.
choice. The elbow should be protected until adequate healing of the soft tissues is apparent. Prevention of this type of injury may be met with frustration since the appropriate application of forces to the elbow in various stressful situations may result in failure in spite of any type of padding or strengthening program that the athlete may have been engaged. Adequate strengthening is not to be frowned upon, however, because strengthening of the musculature about the joint and adequate range of motion of the joint by stretching programs may be beneficial in either the patient's recovery or possibly even in the prevention of this serious type of injury. Chronic sprains usually result from a continuous overloading with resultant micro tears in the ligamentous structures which produce pain and restriction of motion and reduced function. Complications from this chronic abuse result in calcification in the ligamentous structures, restriction or motion in the joint itself, pain on attempted activities and spur formation over the areas of ligamentous attachment. The treatment is rest, early heat, the use of ultrasound and galvanic currents and active exercises. The athlete should slowly progress into active stretching exercises with gradual resumption of activities as pain regresses and range of motion increases. Prevention of further problems in relation to the chronic sprains depends on the ability of the trainer and the athlete to recognize the early symptoms and to initiate early adequate treatment. Protecting the athlete from returning to activities is essential and a gradual progression in the training routine will allow this slow return to functional activities. It is necessary to always remember the importance of adequate warm-up and a continuous stretching program prior to the workout and a warm down process after the work-out.

Neural Injuries

Injuries to the neural structures about the elbow occur more commonly in the collision sports where contusions over the medial side of the arm may result in bruising to the ulnar nerve as it courses subcutaneously beneath the medial epicondyle. Injuries in this area will result in pain in the elbow, numbness over the fourth and fifth fingers and eventually some weakness of the hand and fingers. The initial treatment of this injury is ice. The use of oral enzymes may be indicated along with gradual resumption of mild active range of motion exercises and the use of galvanic stimulation. Prevention of this type of injury is dependent upon the use of adequate protective pads about the elbow. Prevention problems may occur to the athlete when the athletic endeavors continue to abuse or overuse the arm. The most common problem is seen in relation to the injuries to the medial side of the elbow with a late or tardy ulnar type palsy. Here again, the problem is noticed with pain on the inner side of the elbow, numbness along the course of the ulnar nerve distribution particularly along the fourth and fifth fingers and sometimes tingling of the inner side of the forearm and hand. Untreated, this may lead to progressive weakness in the hand, deformity in the fourth and fifth fingers, and atrophy of the interosseous musculature of the hand. Treatment for this type of injury is early recognition and evaluation by nerve conduction studies. If no improvement of conduction is noted, complications of this injury are primarily dislodgement of the osteochondritic lesion with formation of a loose body; however, almost as important is the concomitant changes in the adjacent articular surface with the usual roughening and enlargement of the radial head. This may eventually result in traumatic osteoarthritic changes as a result of the articular change. The initial treatment is rest. Initial x-rays of the joint must be obtained and followed periodically with comparative x-rays. Even though the athlete is supposedly at rest, there have been instances in which the fragments have dislodged and become loose bodies in the elbow joint in spite of this treatment. If this occurs, then surgical removal of the loose body is mandatory to prevent further destruction of the joint itself. Early removal of the loose body may result in some resurfacing of the joint. In certain small lesions, it is possible to see good recovery of function. However, if there is a large defect present and significant secondary changes of the articular surface on the radial head have occurred then, it is possible to have permanent disability in the elbow. Prevention is aimed at the avoidance of excessive overuse in the skeletally immature athlete. This requires education both of the athlete and parent as well as the coach. Every young athlete who begins to complain of elbow pain or restriction or motion should be kept from practicing and have x-rays taken of the elbow to rule out the possibility of this bony defect.

Fractures

As has been shown, the significant forces that are applied to the elbow in athletics may result in various types of injuries. Fortunately, fractures of the elbow are not common even in collision sports. Fractures have been seen frequently in basketball, soccer, and gymnastics but infrequently in football. The problem arises when excessive forces, such as compression, tension, or shear are applied to the elbow joint. In the younger athlete, avulsion of the growth centers may occur particularly to the medial epicondylar area. Shear forces may occur through the growth centers between the capitellum and the trochlea resulting in fractures either through the condyles of the humerus or at the supracondylar area. In the skeletally immature athlete the fractures are usually the result of direct trauma and may range from simple avulsion of the medial epicondyle to seriously complicated fractures of the distal end of the humerus or the radial head. Com-
Following the fixation of the fracture and adequate care for serious injuries to the elbow joint, in spite of all protective measures and may result in the elbow remaining asymptomatic while actively participating, as the synovitis responds to treatment and if the loose body is small enough, it may assume a place of quiet rest in the synovial folds. Then, as the joint irritation subsides, activities may gradually be resumed. If no further irritation occurs, the athlete may continue to compete unless there is a recurrence of symptoms. If synovial irritation continues to occur, then it may not be possible to continue athletic participation and removal of these loose bodies may be necessary. If the elbow remains asymptomatic while actively participating, it may be possible to continue the activity and have the loose bodies removed electively at the end of a specific season. Prevention of spurs or loose bodies in the elbow joint can be achieved only through reduction in the total amount of throwing that the athlete does through the years.

**Conclusion**

An attempt has been made to cover most of the areas of injuries occurring to the elbow in relation to the structures involved. This presentation has not been restricted solely to injuries seen in throwing sports or racquet sports. Many athletes in other sports seem to have quite different types of elbow injuries other than those commonly ascribed to in particular throwing sports.

The most common elbow problem seen in the training room in secondary and collegiate levels appears to be those related to abrasions and contusions of the elbow. Adequate care of the abrasion and adequate padding for the elbow seem to be quite beneficial in preventing this type of problem. Overuse syndromes, when recognized early and given adequate rest, may respond to treatment allowing the athlete to return to participation and prevent early retirement from sports participation due to a painful elbow. Acute fractures and dislocations must be recognized and adequately treated. When this is done early, the result will, in most instances, not be permanent impairment to the elbow joint. Early recognition of nerve compression syndromes and their surgical treatment is essential to prevent any permanent weakness in the hand of the athlete.

**BIBLIOGRAPHY**

Football Spine Pad Protection
For Baseball Catchers

Jeff Middleton, ATC, MS

A no cost way to protect the neck and throat of baseball catchers can be realized by the use of leather lacing and the spine pad from a football girdle.

Last year, our catchers wanted protection for their necks and throats, but did not wish to purchase the commercially available pad seen on television and worn by many professionals. With this in mind, the author devised the following, using the spine pad from a football girdle. The spine pad consists of semi-rigid material that is vinyl-coated, soft, and somewhat flexible. (Photo 1). The pad measures 3½ inches across the top, tapering to 2½ inches at the bottom, and 8 inches long. These dimensions offer adequate protection of the neck and throat. Photos 2 and 3 show two of the common masks used to baseball with the pad attached.

When attaching the pad to the mask, drill two 3/16 inch holes at the wide part of the pad ½ inch from top and the sides. Place leather lacing through the holes and tie off around the framework of the mask. (Photo 4).

The pad is freely movable and does not interfere with the throwing motion of the catcher. When the head is raised, the pad will still protect an area from the chin to the mid-sternum. (Photo 5).

The catchers on our three baseball teams all use the pad and have commented more than once that they have been hit in the throat by a pitched ball, but did not suffer an injury because they were wearing the device. Pitchers also like it, since they can use it as a target.

Mr. Middleton is a teacher/Athletic Trainer at Cedar Ridge High School, Old Bridge Township, New Jersey.

In the spring of 1977, a seminar was held to introduce the TNS method to the leading doctors and coaches of top-class athletes in Finland. Afterwards, each sector was given two TNS units and Questionnaires to be filled out during and after treatment. The series of results consisted of 86 athletes; six were female and 80 were male. Mean ages were 27 years. The athletes represented football, volleyball, track and field sports, ice hockey, weight lifting, skiing, wrestling and tennis. The stimulus repetition frequency was 100Hz. The duration of each TNS session was 15 min. The number of weekly sessions ranged from 2 to 30 with a mean of 3. The mean duration of treatments was 6 days. In eight cases (9%) the result of treatment was excellent, in 96 cases (42%) good, and in 30 cases (35%) fair. Eleven patients (13%) had not benefited from TNS and one patient reported the stimulator had made him feel ill. The results seem to be slightly better than in most clinical studies, in which favorable effects have been reported in 13-75% of the patients. If athletes do in fact react to TNS better than older patients with chronic pain states, the difference may be due to better motivation. It is also possible that in athletes the neural mechanisms underlying the beneficial effect of TNS differ from those of older people who are in less good health. TNS has proved of value in the treatment of various acute and chronic pain states. Recent pharmacologic research has shown that the CNS has an endogenous pain-relieving system of opiate neurons which release polypeptides, known as endorphins, with strong analgesic effects. This physiologic pain-relieving mechanism may offer new possibilities for therapy, and there is already some evidence that electro-acupuncture and TNS activate the endorphin system in the brain and spinal cord and so lead to reduction of pain.

Tim Garl


The impact of acupuncture, our drug culture, and the gate-control theory are explained. Acupuncture has been used by the Chinese to manage pain for centuries. Acupuncture use is limited to about five percent of all surgical cases, in which it appears to work 95 percent of the time. Acupuncture is more successful in surgery on the head and neck than on the limbs. The explanation for the mechanisms of acupuncture is that an analgesia is produced by twirling acupuncture needles in appropriate body regions by sending currents through these needles. Presumably the resulting sensory signals activate neurons on an inhibitory center for pain in the ventral gray matter, with the ultimate release of endogenous opiates. The phenomena of morphine tolerance and addiction is investigated and reveals that on injection of morphine into the periaqueductal gray matter analgesia is produced. This region of the brain was also shown to possess the highest density of opiate receptors. Other regions of the brain were investigated and found that stimulus-produced analgesia (SPA) is specific for reducing pain; it does not interfere with motor function or gross behavioral responses. The analgesia produced by electrical stimulation of the periaqueductal gray matter has been reported to be sufficient to permit abdominal surgery without other anesthetics. Electrical stimulation to the periphery such as TENS may also produce analgesia. Naloxone, a morphine antagonist that blocks opiate receptors is investigated as to its blocking effect on analgesia. The "gate-control theory of pain" as described by Melzack and Wall in 1965 stated that transmission of sensation is controlled by the balance of activity in small diameter, slow conducting fibers and large diameter, fast conducting fibers entering the spinal cord. The progress of our understanding the mechanisms of pain and our application of this knowledge are increasing at a remarkable pace.

Sam Brown


Investigations have been made concerning periods of time of immobilization needed to produce atrophy. Other studies have been done to delineate what determines atrophy. In this study it was desired to find if daily isometric exercise of the casted quadriceps femoris muscle would prevent atrophy of the muscle and prevent strength loss. Twenty college students (17 females, 3 males) participated in this study. All subjects wore a long leg cast on the left lower extremity for nine days. The control group performed no exercise while casted but checked with the investigator each day. The experimental group performed isometric exercise of the left quadriceps femoris muscle daily for eight days. Both groups showed an increase in left thigh circumference with the control group showing a significant increase at the .05 level. Thigh circumference measurement did not indicate atrophy. The significant decrease in strength as measured by the maximum isometric contraction would indicate atrophy of the quadriceps femoris muscle in the control group. The decrease in strength was not significant for the group performing isometric exercise indicating that atrophy did not occur. It is interesting to note that there was an increase in strength and circumference of the right thigh in both groups. This finding could be due to increased activity imposed upon it due to casting of the opposite extremity.

John Wells
Microwave therapy is widely used in medicine for therapeutic purposes. However, increasing concern has been voiced in the literature about side effects which may result from microwave exposure. To implement enforceable standards for effectiveness and safety of therapeutic microwave applications, it is necessary to test compliance in other than human subjects. Proposed standards require that microwave equipment be judged effective if it can produce a specific absorption rate (SAR) of at least 235 W/kg, in the muscle. It is questionable from a clinical point of view whether it is meaningful to expose tissue to levels of 235 W/cm² during therapeutic application, yet to require that the exposure be reduced to 5 to 10 W/cm² within 1 cm. In most therapeutic applications, the tissue 1 cm from the applicator is the same as the tissue being treated. Maintaining specified distances at which safe stray radiation levels are assured is important only when sensitive organs or the therapist could inadvertently be exposed to excessive radiation. Previous experiments have shown that the proposed standard could be easily met in plane models because the entire radiating surface is in contact with the surface of the model. In human applications, skin contact can be improved by mild compression of the tissue mass. An alternative requirement might be to state the distance and place exceeding the safety level of 5 to 10 W/cm². This could be stated for each of the applicators when used with each of the models. With this information, the clinician would be aware of the patterns of stray radiation produced and could then avoid excessive exposure of sensitive parts of the patient’s anatomy.

John Wells


Attention is called to the fact that the pisiform and the pisotriquetral joint can be affected by a variety of pathologies including, but not limited to fracture, osteoarthritis, pre-pisiform bursitis, chondromalacia, osteochondritis dessicans, and dislocation. Muscular and ligamentous attachments, as well as the proximity of the ulnar artery and nerve amplify its importance. Pain disability, and/or swelling on the ulnar aspect of the wrist and palm should notify the examiner to evaluate the distal radio-ulnar joint, the ulnar head fibrocarrilage, the ulnar collateral wrist ligament, the flexor carpi ulnaris tendon, the pisiform, and the pisotriquetral joint. Pain upon resisted wrist flexion and ulnar deviation lead to suspicion of the pisiform and its joint, as well as flexor carpi ulnaris tendinitis. Passive movement of the pisiform upon the triquetrum in longitudinal and transverse directions with the relaxed wrist in flexion and ulnar deviation should demonstrate no adventitious movement, and should not yield pain. Pisiform dislocation has a variety of causes including a fall on an outstretched hand, but minor instabilities have more insidious and, sometimes, progressive etiology. One explanation is that in racquet sports where the stroke occurs at the wrist more than the shoulder (badminton, squash, etc.), and where the end of the racquet acts as a lever on the pisiform in pronation-supination movements, the toroidal stress of this bone is extreme. X-rays, including A-P and skyline views, are often unremarkable. Excision of the pisiform appears to give the best relief.

Greg Vergamini


Practical experience indicates that normal muscle activity tends to protect the knee from injury, the quadriceps mechanism being generally regarded as the most important for protection against valgus forces. The question arises of whether a muscle can contract fast enough to protect the knee in situations in which the muscles are not contracting at the instant of injury. The purpose of this article is to show what the effects of muscle contraction are on the valgus stiffness of the knee and what the speed of response of the muscle is to the valgus stress on the knee. The role of the muscles in preventing injuries to the medial collateral ligament was then evaluated. A knee-testing device was used to test the valgus stiffness of the medial musculoligamentous complex of the knee in five volunteers. Tests were done with the muscles quiescent and with contraction of the sartorius and vastus medialis. To test the speed of response of muscles, the voluntary reaction times of eight subjects were measured using either a visual or tactile impulse for prophylactic muscle contraction. Another test was performed on fifty-one volunteers to determine the maximum torque that could be developed before pain was first felt by each subject. A theoretical analysis of the role of the muscles in protecting the knee during typical skiing and football injuries was performed. The attempt was made to ascertain if the muscles could protect the medial side of the knee if they were not (coincidentally) contracting at the time of the very instant that the accident occurred. It is noteworthy that in the analysis described, no ligament-muscle protective reflex initiated by pain, and no tendon-stretch reflex, even if sustained, could act in time to protect the medial ligament complex of the knee from injury. Voluntary muscle contractions were much too slow and thus will not protect the knee from injuries, unless the muscle is contracting at a significant force at the time of loading.

Bob and Kathy Doyle


The following test variables were studied: Headform-resilient versus metal, impact surface-soft versus hard, impact site — top versus rear, and velocity — low versus high. These important variables were studied by systematically changing the test variables and measuring the effect of these changes on output responses. The degree of correlation between variables was also measured. Twelve models of football helmets were purchased from four manufacturers. The headforms were metal, magnesium alloy. Top and back impact sites on each helmet were marked. The correlation between headforms appeared to be sufficiently high to justify the use of the metal headforms in test methods. The correlation between impact surfaces was consistently very high, and the correlations between velocities appeared to degrade when conditions existed which led to high impact responses.

Bill Rogers

TELL A FRIEND ABOUT

ATHLETIC TRAINING
Historically, interscholastic athletics have continually been confronted with many legislative, financial and political obstacles. Even so, they have continued to grow and develop, with the number of participants increasing at a rapid pace. A 1976 survey, for example, indicated that over 6.4 million boys and girls were competing at the high school level; with team sports, particularly those involving body contact, increasing in popularity\(^5\). Perhaps this increase in the popularity of team sports, despite the above-mentioned obstacles, is due to the fact that for many years interscholastic athletics have been accepted and encouraged as a valuable aspect of the total education of our young people. In fact, national meetings and national conferences have been conducted to allow educational leaders the opportunity to discuss and interpret the human values that can be developed through participation in athletics\(^6,7\).

As mentioned above, the growth experienced by interscholastic athletic programs has not taken place without resistance and problems. One of these problems, and the primary concern of this study, was athletic injury occurrence coupled with the lack of proper health care for the athletes involved. A survey released in 1979 by the United States Department of Health, Education and Welfare, revealed that over one million high school and college athletes are injured on an annual basis\(^8\). This statistic has to be alarming for any individual having the slightest concern for health care of athletes, since existing care has been determined "barbaric" in some school systems\(^9\), is practically non-existent in many other systems\(^10\), and in many situations too much time has lapsed between injury occurrence and treatment\(^11\). This problem is further enhanced by the fact that even though interscholastic athletics have gained public support, the same people providing such support have probably not been aware of athletic training nor indicated a great deal of concern about sport injuries.

Kegerreis\(^1\) reported that the AMA has identified the following as being vital to the success of all athletic programs: (a) good coaching, (b) good officiating, (c) good equipment and facilities, and (d) good health supervision. He further stated that the latter is glaringly absent from today's secondary schools and that many people simply are not aware that present health care is drastically inadequate.

Inadequate health care for athletes has been further substantiated by the research of Kelly, et al. in Pennsylvania\(^11,12\). Their data revealed that 77 percent of the male physical educators, 86 percent of the coaches, and 85 percent of the non-certified trainers in that state were considered obsolete in their current knowledge of care and treatment of injuries, conditioning programs, diet, drugs, and heat exhaustion. Furthermore, their data indicated that present health care practices but also for anatomy, physiology and other related subject matter.

Thurmond\(^13\) attempted to assess the ratings given for various college courses taken by 491 high school basketball coaches in Oklahoma who had an average of 10 years of coaching experience. From 18 courses being rated as to value, 84 percent of the coaches gave Prevention and Care of Athletic Injuries the highest rating, while 12 percent rated it the second highest.

In a more positive perspective, Bowlus\(^1\) has shown how the employment of certified athletic trainers in the Davenport, Iowa Community Schools has enhanced their program and improved the health care for athletes in their system. He indicated that the coaches, parents and administrators were pleased and enthusiastic about the progress that had been made since their employment in 1974-75 and concluded that the benefits clearly outweighed the expenses involved.

Martin\(^14\) reported that a growing health care awareness exists not only among physicians, coaches, and school administrators, but also among athletes and parents. He further reported that new rules have focused on safety needs, with the most significant development being a proliferation of sports medicine clinics.

The review of literature has clearly revealed that athletics are increasing in popularity for both boys and girls, and that the many related problems of proper health care for the athletes are also increasing. Our concern, therefore, for this important topic of proper health care practices as well as the identification of possible solutions for the existing problems has served as the motivating factor that led to the pursuit of the present study.

**Jerry P. Wrenn, PhD and David Ambrose, BS, ATC**

"The Ten Commandments" for injury prevention, care of the injured athlete, and being a better coach. His tenth commandment for care of the injured athlete, "The injured athlete is the most important person in our mission," cannot be overemphasized.

Bellow indicated that not enough is known about athletic training and how injuries might be prevented through proper training techniques. In fact, the findings of his research indicated that while most coaches, trainers, faculty members and players were aware of the profession of athletic training, parents of the players were neither aware of athletic training nor indicated a great deal of concern about sport injuries.

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Purpose of the Investigation
The purpose of this investigation was an attempt to determine what the existing health care practices were for high school athletes in the State of Maryland. Even though some states are probably devoting more effort to this topic than others, the health care practices in Maryland are probably exemplary of what is occurring in most states throughout the nation.

Specifically, the study was undertaken to seek answers to the following:
1. What was the availability of physicians, athletic trainers, and physical therapists to athletes in the State of Maryland?
2. Who was responsible for physical examinations and health clearance for participations?
3. What type of medical assistance was provided at games and/or practice?
4. Who was responsible for administering initial evaluation and treatment of an injured athlete?
5. Were records being maintained on athletic injuries, and who was responsible for the athlete?
6. Who was responsible for providing follow-up care and daily evaluation of the athlete?
7. What was being done by the various school systems to improve health care practices?

An attempt was made to determine the existing health care practices for interscholastic athletes in Maryland in order to gain insight as to where improvements need to occur. The data presented is in no way meant to be negative toward any specific school system, since many problems are admittedly uncontrollable and are a fault of the entire system rather than of specific individuals having the responsibility for medical supervision for the athletes. In fact, it was assumed that the majority of the individuals having additional responsibility for medical supervision are sensitive to the issue, but are limited in what they can offer due to heavy demands placed on them by their primary duties of teaching, administrative work, and coaching.

Methods and Procedure
To obtain the data needed, a questionnaire was developed similar to the one utilized by Redfearn5 in his Michigan study. The questionnaire included 25 items involving yes-no responses, check-lists, and a ranking of categories.

Prior to sending out the questionnaire to the various schools, the Executive Director for the Maryland Association of Secondary School Principals as well as the State Director of Athletics were contacted for endorsement of the study. A copy of the questionnaire was submitted to each individual accompanied by an explanation of the purpose for study. Upon receiving their reactions and endorsement, a copy of the questionnaire was mailed to the principal of each high school listed in the handbook of the Maryland Public Secondary School Athletic Association (N = 149), again accompanied by a letter of explanation and assurance of anonymity of results presented by individual principals. The principals were requested to complete the questionnaire and return it at their convenience.

The data were collected during the 1978-79 academic year, and the questionnaires were color coded by classification of schools. The following classification of schools existed in Maryland at the time of the investigation, with the AA schools having the highest enrollment:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number Responding</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA - 35 schools</td>
<td>27</td>
</tr>
<tr>
<td>A - 37 schools</td>
<td>30</td>
</tr>
<tr>
<td>B - 38 schools</td>
<td>35</td>
</tr>
<tr>
<td>C - 39 schools</td>
<td>36</td>
</tr>
<tr>
<td>Total 149 schools</td>
<td>128</td>
</tr>
</tbody>
</table>

The number of participants in the 149 schools engaged in 19 sport activities, included 45,855 boys and 23,699 girls.*

Findings
As previously indicated, the principal of each high school in Maryland was sent a copy of the questionnaire. The following responses were received according to school classification:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Number Responding</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA - 35</td>
<td>27</td>
<td>77%</td>
</tr>
<tr>
<td>A - 37</td>
<td>30</td>
<td>81%</td>
</tr>
<tr>
<td>B - 38</td>
<td>35</td>
<td>92%</td>
</tr>
<tr>
<td>C - 39</td>
<td>36</td>
<td>92%</td>
</tr>
<tr>
<td>Total 149</td>
<td>128</td>
<td>86%</td>
</tr>
</tbody>
</table>

One of the most relevant findings for this investigation was the fact that 86% of the principals responded to the request, with no less that 77% reporting for any one school classification. This positive response is seen as a clear indication of interest and concern for this topic by the high school principals in the State of Maryland.

Question Analysis
The questions were grouped according to similarity of information sought, and analyzed as follows:

1. In what sports are physical examinations given?
The answer for this question was obviously all sports (100%) since the following rule has been adopted by the Maryland Public Secondary School Athletic Association (MPSSAA):

   A student shall be examined and certified to the high school principal as being physically fit to participate in any try-out or as a member of a school team. The examination shall be performed by a qualified physician.4

2. Does your school have a team physician?

<table>
<thead>
<tr>
<th>School</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>A</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>B</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>C</td>
<td>14%</td>
<td>86%</td>
</tr>
</tbody>
</table>

The responses received for Question 2 indicated that only a small percentage of the athletes had access to a team physician, with the AA schools reporting the highest percentage of participation.

3. Who serves as your school’s team trainer?

<table>
<thead>
<tr>
<th>School</th>
<th>Full Time</th>
<th>Student</th>
<th>Volunteer</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>82%</td>
<td>None</td>
<td>11%</td>
<td>None</td>
</tr>
<tr>
<td>A</td>
<td>80%</td>
<td>3%</td>
<td>7%</td>
<td>3%</td>
</tr>
<tr>
<td>B</td>
<td>80%</td>
<td>3%</td>
<td>None</td>
<td>3%</td>
</tr>
<tr>
<td>C</td>
<td>80%</td>
<td>None</td>
<td>9%</td>
<td>3%</td>
</tr>
</tbody>
</table>

For each school classification the coach had the primary responsibility for athletic trainer services, with only 2% of all schools employing a full time athletic trainer.

4. In what sports is a physician in attendance at games?

<table>
<thead>
<tr>
<th>Sport</th>
<th>Football only</th>
<th>Other Sports</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>67%</td>
<td>9% of the respondents indicated that physicians were in attendance at games involving contact sports other than football</td>
</tr>
<tr>
<td>A</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>44%</td>
<td></td>
</tr>
</tbody>
</table>

Percent for All Schools

<table>
<thead>
<tr>
<th>School</th>
<th>Football only</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>67%</td>
<td>9%</td>
</tr>
<tr>
<td>A</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>44%</td>
<td></td>
</tr>
</tbody>
</table>

*Data provided by State Director of Athletics

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W. R. Spence, M.D.
President, Spenco Medical Corporation

Write: Spenco Medical Corporation—P.O. Box 8113, Waco, Tx 76710
Physicians, with few exceptions, attended only football games, and even for football they were present less than 60% of the time.

5. Are all contests attended by a person or persons skilled in emergency procedures?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Did Not Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>44%</td>
<td>52%</td>
<td>4%</td>
</tr>
<tr>
<td>A</td>
<td>53%</td>
<td>48%</td>
<td>4%</td>
</tr>
<tr>
<td>B</td>
<td>69%</td>
<td>31%</td>
<td>3%</td>
</tr>
<tr>
<td>C</td>
<td>47%</td>
<td>52%</td>
<td>None</td>
</tr>
</tbody>
</table>

Percent for All Schools 46% 52% 2%

Even more revealing than the poor percentage of attendance of physicians at contact sport events was the fact that only 46% of all contests are attended by individuals skilled in emergency procedures.

6. Who makes the initial evaluation of athletic injuries at your school?

The data received for Question 6 indicated that the primary responsibility for initial evaluation of athletic injuries was under the jurisdiction of the coaches. Therefore, when the response of Question 5 is compared with that of Question 6, one can conclude that approximately 50% of the coaches had a responsibility within their duties for which they probably were not qualified.

7. In the event of a serious injury during practice, estimate the time (in minutes) required to stabilize the injured athlete and transport to the nearest medical facility.

<table>
<thead>
<tr>
<th></th>
<th>10-15 min.</th>
<th>15-20 min.</th>
<th>20-30 min.</th>
<th>30-40 min.</th>
<th>40+</th>
<th>Did Not Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>48%</td>
<td>22%</td>
<td>19%</td>
<td>3%</td>
<td>None</td>
<td>7%</td>
</tr>
<tr>
<td>A</td>
<td>29%</td>
<td>31%</td>
<td>37%</td>
<td>3%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>B</td>
<td>29%</td>
<td>34%</td>
<td>23%</td>
<td>6%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>C</td>
<td>31%</td>
<td>28%</td>
<td>22%</td>
<td>8%</td>
<td>11%</td>
<td>None</td>
</tr>
</tbody>
</table>

Percent for All Schools 31% 28% 25% 5% 7% 3%

In 84% of the cases involving stabilization and transportation of an injured athlete, less than 30 minutes were needed, and less than 20 minutes were needed 29% of the time. This finding was positive since time between injury and medical attention is critical for treating certain injuries.

8. Who provided follow-up care and evaluation of injured athletes?

<table>
<thead>
<tr>
<th></th>
<th>Coach</th>
<th>Family Physician</th>
<th>Team Physician</th>
<th>Teacher Trainer</th>
<th>Nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>19%</td>
<td>78%</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>A</td>
<td>13%</td>
<td>77%</td>
<td>3%</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>B</td>
<td>14%</td>
<td>80%</td>
<td>3%</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>C</td>
<td>6%</td>
<td>86%</td>
<td>6%</td>
<td>2%</td>
<td>None</td>
</tr>
</tbody>
</table>

Percent for All Schools 13% 82% 3% .75% .75%

Two schools did not respond to this question, and one school indicated Rescue Squad.

9. Does your community have access to a physical therapist for athletic rehabilitation within the community or county?

For all school classifications the family physician had the primary responsibility for follow-up care and evaluation of the injured athlete, while only 59% of the schools indicated access to a physical therapist for rehabilitation.

10. Does your school contain any treatment modalities? Ninety-four percent of those responding indicated that some type of modality was used in their school.

11. Are you familiar with the state laws concerning the use of therapeutic modalities?

The data received for these two questions revealed one of the most significant findings for the entire study. While 94% of the schools responding indicated some type of treatment modality was available in their school, only 13% indicated that they were familiar with the state laws regarding the use of such modalities.

12. Can you document athletic injuries through your existing system?

13. Is anyone on your staff charged with keeping records on injured athletes?

Even though 76% of the principals reported that they could document athletic injuries, only 52% had assigned a specific staff member for this task. It would appear necessary that each school would give specific attention to this important procedure in order to determine the exact impact that athletic injuries have on the student athletes.

14. Are parents familiar with the training staff?

15. Does your school have a valid informed consent acknowledgement agreement between the school and the student-athlete (parents or guardian if in a minority status) that explains the schedule of treatment in athletically incurred injuries?
Approximately two-thirds of the parents were listed as being familiar with the training staff involved; however, less than 50% of the schools provided a valid informed consent agreement for parents which explained schedules of treatments for athletically incurred injuries. It was assumed that in all cases the following requirement by the MPSSAA was met:

Students shall present to their high school principal a certificate from their parents or guardian indicating the parents’ or guardian’s permission for participation.

16. If your school does not have a trainer, would you want a full time athletic trainer?

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Percent for All Schools 34% 63% 3%

17. When considering the application for employment of a prospective education faculty member, for which of the following do you select them; coaching reputation; personality; academic background (scientific minor, etc.); physical education background, physiology, anatomy, etc.; expertise in a singular sport; institution attended; years of coaching experience; and evident adaptability to your school and programs.

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Percent for All Schools 86% 10% 4%

18. If your school does not have a trainer, would you want a full time athletic trainer?

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Percent for All Schools 80% 10% 3%

Summary of Findings

1. In order to try out or be a member of a team, every inter-scholastic athlete had to have a physical examination performed by a qualified physician.
2. Only 21% of the schools reporting had a team physician.
3. With few exceptions, physicians attended only football games.
4. The coach had primary responsibility for athletic training duties, including initial evaluation of athletic injuries.
5. Only 50% of the schools had a designated person for keeping records of athletic injuries.
6. Follow-up care for injuries was provided by the family physician.
7. Majority of schools listed some type of treatment modalities, while the majority did not reveal familiarity with state laws concerning use of such equipment.
8. Scientific background was given a high priority as an applied criteria for employment of instructor-coaches.
9. A large percentage of the principals indicated a desire for a full time athletic trainer in their school.

The findings of this study closely parallel those of Redfearn. His research was conducted in the Michigan Secondary Schools and was the only study that could be found similar in nature to the present investigation. Minimal comparison, therefore, could be made between what was found and what has been reported in the literature.

Recommendations for Improvement

Based on the findings of this investigation, the following recommendations appear justified:
1. School administrators and parents should make every effort possible to see that all practice sessions and games are attended by individuals trained and skilled in emergency medical procedures. This factor is obviously of necessity in those sports where the probability of injury is high.
2. In school systems where the coaches must be responsible for all athletic training duties, instruction should be provided to the extent that these individuals are as competent as possible in dealing with athletic injuries. All coaches should also make every effort possible to have a complete understanding of their local laws and the extent to which they might be held liable for negligence.
3. Wherever possible school systems should strongly consider the employment of competent athletic trainers. Since more school systems are considering this alternative, it is incumbent upon certifying agencies to be certain that all individuals receiving certification endorsement have the necessary knowledge and skills to do their described jobs effectively.
4. Institutions that are concerned with professional preparation of teachers should make an extra effort to
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<td>817/834-7160</td>
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Johnson & Johnson welcomes you to the Annual Meeting and Clinical Symposium of the NATA. For over fifty years, J&J has been providing you with a line of quality products to help keep your players injury-free and on the playing field.

This year, J&J is again leading the way. We are bringing our fine line of products to you through established and respected manufacturers’ representatives who can provide you with efficient coverage and service.

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upgrade and improve their curricular offerings in the areas of athletic health care. In addition, all physical education majors and students pursuing coaching options as a part of their professional preparation should be prepared to deal with this problem the way they will be expected once employed.

5. The knowledge and skill level of those people directly responsible for health care of the athletes probably should be assessed in order to determine the extent to which they are or are not competent for the task at hand.

BIBLIOGRAPHY


16. Yeager B: Medical care for young athletes: ‘Pretty barbaric, but that’s the way it is.’ The Physician and Sportsmedicine 2:75-80, November 1974.

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ATHLETIC TRAINING • Summer 1980
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Orthoplast Splint: Support Method for a Sprained Ankle

The orthoplast splint is a semi-rigid means of support for sprained ankles. The splint is described by Cornelius Stover, M.D., in his article entitled, “A Functional Semirigid Support System for Ankle Injuries,” (1). The splint is constructed from orthoplast shaped in the form of a stirrup. It starts from the base of the calf, on both sides of the leg and extends underneath the heel of the foot.

The splint permits plantarflexion and dorsiflexion which are necessary for athletic activity. However, it limits the amount of inversion and eversion, the former being one of the most frequent mechanisms of ankle sprains.

Material Needed
The orthoplast splint is relatively easy to make and requires limited supplies. After initially constructing the splint for an athlete, it can be used time and time again. The raw materials needed are as follows:

1. A sheet of orthoplast (white, rigid, plastic material)
2. Moleskin
3. Plastic air bubbles (used in packaging) or foam rubber
4. Hydrocollator (or similar hot water source)
5. 1/2" tape and/or elastic tape (elastikon or conform)
6. Bandage scissors

Construction of the Splint
The orthoplast splint should begin at the base of the calf on either side of the leg and come underneath the heel of the foot (see Figure 1). The first step in making the splint is to cut out a paper pattern the size and shape needed for the splint (see Figure 2). The portion of the splint that goes underneath the heel should be about 1/2 the width of the side portions.

The sheet of orthoplast should be placed in the hydrocollator for about 30 second to allow the orthoplast to become pliable. The pattern should then be used as a guide to cut the splint out of the orthoplast. While the orthoplast is still pliable, fit the splint on the athlete in the position of application (see Figure 1 again). Take note that the lateral and medial malleoli protrude into the orthoplast. To eliminate the discomfort, use your fingers to depress the orthoplast. The malleoli will set in these depressions making the splint form fitted for each athlete. Be sure the entire splint fits snugly against the athlete’s foot and lower leg. This will prevent weakening of the splint later in the season. When it is certain the splint fits comfortably, allow the orthoplast to cool in the fitted position. This can be facilitated by putting the orthoplast splint in a refrigerator or rubbing an ice cube on it.

Once the orthoplast is rigid, apply moleskin to the portions of the splint that lie underneath the heel and to the portions underneath the base of the calf. This will minimize friction in these areas (see Figure 3). Finally, the portions of the splint into which the malleoli protrude need to be padded. After trying, a variety of materials for this purpose, the one that was found most comfortable is plastic air bubbles used for packaging. Cut a strip of these air bubbles approximately 3" x 24" and fold it in 4" sections 6 times. Tape it to the splint in the area of the malleolar depressions (see Figure 3). This has eliminated any friction in these potential trouble spots. Once the padding is taped onto the splint, it is ready to apply to the athlete.

Applying the Splint
To apply the splint, have the athlete’s foot propped on a table in the neutral position. Place a lubricated gauze pad behind the heel and on the instep on the ankle. The pads will protect these areas from potential friction and irritation. Cover the entire ankle with prewrap. Anchor the prewrap at the base of the calf with 3 strips of 1/2" tape (see Figure 4). Place the splint in position (see Figure 1) and repeat with three more anchors of tape over the splint at the base of the calf (see Figure 5). Apply heel locks with elastic tape to lend stability to the ankle, while maintaining normal range of motion (see Figures 6 and 7.)

BIBLIOGRAPHY

Ms. Cleaves is an Assistant Athletic Trainer and adjunct faculty member of Health and Physical Education at Kean College of New Jersey in Union, N.J.
You are cordially invited to attend the 1980 Schering Symposium on “Podiatry and Biomechanics as It Relates To Sports” which will be held on Sunday, June 8, 1980, beginning at 1:00 P.M. in the Ballroom of the Philadelphia Sheraton Hotel, 1725 John F. Kennedy Boulevard, Philadelphia, Pennsylvania.

This program is sponsored by Schering Corporation, a pharmaceutical firm, as a professional contribution to continuing medical education of athletic trainers in conjunction with the National Athletic Trainers’ Association Annual Meeting and Clinical Symposium.

The Schering Symposium will have four speakers plus a workshop setting to include the practical application to design and reason of common foot problems.

SUBJECT: “Podiatry and Biomechanics As It Relates To Sports”

Moderator:

Vincent J. DiStefano, M.D.
Associate Clinical Professor of Orthopedic Surgery Hospital, University of Pennsylvania and affiliated hospitals; Associate Director, Paoli Sports Medicine Clinic; Team Physician for the Philadelphia Eagles Football Club.
Topic: “Anatomy of the Foot and Ankle”

Panelists:

Harold D. Schoenhaus, D.P.M.
Chairman, Department of Orthopedics, Pennsylvania College of Podiatric Medicine; Chief, Podiatric Surgery, John F. Kennedy Memorial Hospital, Philadelphia, Pennsylvania.
Topic: “Biomechanics as it Relates to Lower Extremity Injuries”

Alan K. Whitney, D.P.M.
Professor of Orthopedics and Biomechanics, Pennsylvania College of Podiatric Medicine.
Topic: “Biomechanical Footwear Balancing”

Raymond A. Rivell, D.P.M.
Clinical Instructor, Pennsylvania College of Podiatric Medicine; Podiatric Consultant, Philadelphia Eagles Football Club.
Topic: “Common Padding and Strapping Used In Foot Injuries”

Workshop:
Presentation by podiatry students of the Pennsylvania College of Podiatric Medicine of practical application and design of foot devices with audience participation.
Dr. S.E. Bilik is considered the original pioneer in athletic training and the "father" of Modern Athletic Training.

He graduated from the University of Illinois in 1914 and was hired first as a part-time trainer and later as a head trainer. His salary was $1,200 for the first year and $3,000 the next year. This was considered a large salary in those days.

In 1916, Dr. Bilik published his first edition of the Trainers Bible, which later went to ten editions and is now a collectors item. The Trainers Bible was the first known written publication in athletic training.

He went on to obtain a Doctor of Medicine Degree and then became the team physician for the University of Illinois until his death in 1972.

Editor's Note: This section is the first in an attempt to bring back items, events, and happenings that have occurred in years past. It is our hope that many of the readers will recall these things with nostalgic memories while others will be surprised at what did take place in our profession ten, twenty, and thirty years ago. — K.W.

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During the past three years athletic trainers across the country have been recording injury data as part of the National Athletic Injury/Illness Reporting System. Results of a three-year study of injuries in football were recently submitted to the U.S. Consumer Product Safety Commission in a report entitled "An Epidemiological Examination of the Association of Selected Products with Related Injuries in Football 1975-1977". This article is a summary of that report.

The NAIRS system relies upon data submitted on a voluntary basis by athletic trainers across the country. Standardized forms are mailed to Penn State University by the athletic trainers on a regular basis. In return, case reports provide the athletic trainer with file copies for each injury/illness that was recorded. In addition, NAIRS returns a monthly summary table for each sport being followed. This table displays the injury rates for the team and the average rate for all teams for that sport and level of play. At the end of each sport season additional summary tables are sent to the recorder which display the nature of injury by position (quarterback, wide receiver), injury by situation (run play, inside tackle, kickoff), and injury by activity (blocking, being tackled). Participating institutions can request specific additional information at any time.

Since NAIRS computer programs are capable of tabulating data in a variety of ways, decisions based on the data can be made at various levels. athletic directors and conference officials can request injury risk information for a particular sport. Athletic trainers who need to make daily decisions can use the data to determine if there is a high number of minor/everyday injuries that should be dealt with in the training room. Additionally, a trainer may want to know, "How does our ankle injury experience compare with the rest of the conference?"

As a system, NAIRS has several identifiable versions. NAIRS I provides detailed surveillance input and output regarding the athlete's injury, sport and instrument as well as product-related considerations. All forms are the same regardless of the sport being recorded. Most items require only a simple check of the relevant code option. Recorder handbooks provide guidance on the code options. NAIRS II is an abridged selection of NAIRS I codes which does not contain product-related or player information. Participating institutions may select either NAIRS I or NAIRS II for each sport it chooses to record. NAIRS II data can be merged with NAIRS I data for collective analysis. Table 1 displays the total football exposure for high school and college, 1975-1977. (See Table 1)

Definitions

NAIRS defines a REPORTABLE injury as any injury which causes cessation of an athlete's customary participation for at least one day following the injury. Any brain concussion serious enough to require observation before return to play is also a REPORTABLE injury. Any dental injury which should receive professional attention is REPORTABLE.

A MINOR injury is a reportable injury in which the athlete was able to return to participation within one week from the day of onset.

A SIGNIFICANT injury is one with time loss greater than seven days. Within the significant category, those injuries which permit the athlete to return to practice within eight to twenty-one days are termed MODERATE.

Inability to return to participation within twenty-one days is the criterion used to assign MAJOR status to a health problem. To avoid overinterpretation of the word MAJOR, a fourth classification, SEVERE, is used for the type of permanently disabling injury of societal importance such as quadriplegia, amputation, or death.

Findings

The data for 1975-1977 football seasons show that, on the average, a high school football team experienced about eight REPORTABLE injuries per 1000 athlete-exposures. High school teams accumulated approximately 4,000 athlete-exposures during the course of the season. This means that the average high school team in the NAIRS population experienced in the vicinity of 32 REPORTABLE injuries per season. College teams repor-
NAIRS record about 11 injuries per 1000 athlete-exposures and the average team experiences 7600 exposures throughout the season. (1) Bear in mind that these are REPORTABLE injuries. The case rate for SIGNIFICANT injuries is much lower. NAIRS high school teams report about two SIGNIFICANT injuries per 1000 athlete-exposures while the incidence rate for college teams is three per 1000 athlete-exposures.

**Head and Neck** - NAIRS data show relatively little year-to-year fluctuation and an overall low frequency of cerebral neurotrauma resulting from participation in football. Roughly five of every 100 athletes experienced a REPORTABLE concussion (cessation of the athlete’s participation for observation before returning to play). When confined to SIGNIFICANT concussions the rate drops by a factor of ten. Only five of 1000 football players experienced a concussion which required that they miss more than a week of participation. No skull fractures or serious permanent brain damage were reported during the first three years of study. (1) There were 11 cervical fractures, with five being recorded as avulsion fractures which result from a mechanism other than impingement and are not a threat to the spinal cord. One case of quadriplegia was reported. (1) This injury was described as resulting from hyperflexion which is not consistent with the “karate chop” (hyperextension) mechanism alleged to be associated with football helmets.

Even though SIGNIFICANT cerebral neurotrauma is a relatively infrequent occurrence in the NAIRS football experience, it is desirable to look within the population to determine whether a particular helmet is associated with neurotrauma more than would be expected. Stated another way, “Is there objective evidence that the frequency of neurotrauma could be even more infrequent if a particular helmet was no longer utilized?” Thirteen helmets representing eight manufacturers and most of the models worn with regular frequency by the NAIRS teams were analyzed. Injury rates showed only slight variability from helmet to helmet. The three year SIGNIFICANT concussion rate per 1000 athlete-exposures for all helmets combined was 0.1. (1) No single helmet exceeded this rate.

**Playing Surface** - The question of whether or not artificial surfaces contribute an additional significant risk of injury is a major controversy in football. It has been claimed that surface hardness and shoe-turf interface do create an added risk. To determine whether surface hardness contributes to additional injury, NAIRS analyzed injury data on concussions. Only college data were used since high schools don’t often experience artificial surface. As already noted, SIGNIFICANT concussions were relatively infrequent events. Nevertheless, the observed rates did not vary considerably when comparing natural grass to artificial surface. The three year rate for SIGNIFICANT concussions on grass was 0.1 per 1000 athlete-exposures. Both Astroturf and TartanTurf demonstrated an overall three year rate of 0.1 per 1000 athlete-exposures. (See Table 2) It is probable that artificial surfaces may feel harder upon impact but the evidence would not support the belief that surface hardness adds to the risk of sustaining a SIGNIFICANT concussion.

In order to determine whether playing surface is associated with additional injuries related to the shoe-turf interface, NAIRS analyzed meniscus/knee sprains and ankle sprains. The three year rates for SIGNIFICANT injuries of this type seem to be fairly constant for each playing surface. SIGNIFICANT meniscus/knee sprains and ankle sprains demonstrate slightly higher rates for both artificial surfaces, than the rates observed for these injuries on natural grass. (See Table 2) Since the rates are higher, NAIRS wanted to determine the effect of these higher rates in a practical sense. Two types of analytical procedures were initiated. A Chi Square was used to determine whether the observed differences were greater than could be expected by chance. (1) The second analysis was termed the critical interval criterion. (1) This technique was employed to find out the number of additional injuries a team could expect if all exposures occurred on one surface instead of on natural grass. The tolerance level of how many additional injuries is acceptable or unacceptable is a personal value judgement. The criterion of clearly greater than one additional injury per season per team was adopted by NAIRS as the minimum critical interval necessary for consumer oriented issues such as playing surface. Less an interval could be attributed to normal fluctuation of experience and/or coincidence. This interval does not necessarily demon-

**Total Football Exposure**

**High School and College**

**1975-1977 NAIRS I & II**

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Selected Significant Injury Rates, Total Season
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<td>Meniscus/Knee Sprains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case/1000AE</td>
<td>0.8</td>
<td>0.8</td>
<td>0.7</td>
</tr>
<tr>
<td>N</td>
<td>143</td>
<td>128</td>
<td>246</td>
</tr>
<tr>
<td>Ankle Sprains</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case/1000AE</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>N</td>
<td>71</td>
<td>48</td>
<td>89</td>
</tr>
</tbody>
</table>

Table 2
The Number of Additional Significant Injuries
A College Football Team Can Expect
If All Exposures In One Season Are On
Astroturf or Tartanturf Rather Than
Natural Surface

<table>
<thead>
<tr>
<th></th>
<th>Astroturf</th>
<th>Tartanturf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concussion</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Meniscus/Knee Sprain</td>
<td>1</td>
<td>2**</td>
</tr>
<tr>
<td>Ankle Sprain</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Foot Sprain</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Great Toe Sprain</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Lower Leg Fracture</td>
<td>ND</td>
<td>ND</td>
</tr>
<tr>
<td>Abrasion</td>
<td>ND</td>
<td>ND</td>
</tr>
</tbody>
</table>

ND = No Difference by critical interval test
Absence of asterisk = No difference by Chi Square
** = Probability equal to or less than .05 level
*** = Probability equal to or less than .001 level

Table 3
The Number of Additional Significant Injuries
A College Football Team Can Expect
If All Exposures In One Season Are On
Astroturf or Tartanturf Rather Than
Natural Surface

It must be cautioned that the differences displayed in
Table 3 do not indicate a cause-effect relationship between
certain types of injuries and playing surface. The data
merely reflect an "association" between playing surface
and meniscus/knee sprains and ankle sprains. In order to
portray this association more accurately, multivariate
statistical tests are currently being performed. These
tests will permit identification of other factors which may
relate to this association. Factors such as home vs. away
contest, position played by the injured person and type of
activity at the time of the injury may influence the
association.

In conclusion, it should be noted that the utility of the
NAIRS data for decision-making is based on year-to-year
continuation of systematic data collection along with in­
creased numbers of teams. The greater the number of
teams participating in each sport, the greater will be the
ability to quantify and evaluate the risks of sport par­
ticipation.

If you would like to input data to NAIRS for the return
of its' services, you may enroll by writing to: Mr. John
Powell, ATC, NAIRS Coordinator, White Building, Penn
State University, University Park, PA 16802.

This project has been funded at least in part with
Federal funds from the United States Consumer Product
Safety Commission under contract numbers CPSC-C076-
0050 and CPSC-C-77-0039. The content of this publication
does not necessarily reflect the views of the Commission,
nor does mention of trade names, commercial products, or
organization imply endorsement by the Commission.

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E.R.G. ELECTROLYTE REPLACEMENT WITH GLUCOSE DE-LICIOUS!

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A Specialized Pad for the Acromioclavicular Joint

There are many occasions to experiment with different materials in the formation of individualized protective equipment. These opportunities are usually created out of a specific need. Such it was during the author's undergraduate years at Ashland College and year of graduate study at Miami University. In each case, the school's number one running back suffered an acromioclavicular separation. The following pad was constructed by Gary W. Lake, ATC, Head Athletic Trainer, Ashland College and modified by Ken Wolfert, ATC, Head Athletic Trainer, Miami University and the author for the protection of the acromioclavicular joint.

Materials
The following is a list of the materials necessary to construct the acromioclavicular pad.
1. Foam “Toilet Seat” pad*
2. “Temperstik” foam*
3. “Orthoplast”*
4. Shoulder Pad Strap Material
5. (4) Short Posts and Screws from the Face Mask/Helmet Assembly
6. (10) Plastic Washers
7. (2) Shoulder Pad Strap Buckles
8. “Moleskin” Adhesive Felt*
* Tradenames

Mr. Wershing is a graduate assistant in the department of Health and Physical Education and a staff member in Sports Medicine Services at Miami University Oxford, Ohio.

Procedure
When constructing the pad it is important to remember to fit the pad to the individual who will be wearing it in competition. It does no good to put a “standardized pad” on a person needing specialized protection.

The first phase in the construction of the pad consists of the fitting of the elastic strapping. Make four holes in the toilet seat, large enough to accommodate the posts and screws. These holes should be in the four corners of the toilet seat, approximately one inch in from the outside edges. Any sharp instrument can be used to make the holes. A Phillips screw-driver does an adequate job. Next, have the athlete put on the toilet seat. Measure enough of the strap material to secure the toilet seat to the athlete snugly. (Figure #1) The measurement should be made from the back right corner, under the arm, to the front right corner. Then, allowing eight inches of material for strap adjustment, cut the material. Repeat the procedure for the left strap. Make a hole through the strap material, \( \frac{1}{4} \) of an inch from one end and in the center of the of the width of the strap. Have the athlete remove the toilet seat. The strap assembly, is now ready to be attached.

Starting with the back, right hole, place a washer over the post and insert the assembly into the toilet seat, from the inside out. Place another washer over the post, adding the first strap, so that its opposite end hangs away from the pad. Sandwich the strap between another washer, insert the screw and tighten it into the post. Repeat this procedure for the left strap.

A similar procedure is used to attach the buckles to the front of the pad. Inserting a washer on to the post, push
the assembly through the hole and sandwich the pad between another washer. Place the buckle on to the post, insert the screw and tighten it down. Repeat this procedure with the opposite side. Now, thread the left strap through the left front buckle, starting with the proximal slot, moving distally. Thread the right strap the same way.

It is important at this point to remember that in order to remove the pad, the athlete must loosen the straps. Failure to do so will tear the pad and shorten its life span.

The second stage of construction involves the fitting of the temperstik inlay. Cut the temperstik to the shape of the underside of the toilet seat. The inlay should cover only that part of the toilet seat that rests upon the superior aspect of the injured shoulder. Remove the paper backing and adhere the inlay to the underside of the toilet seat. Have the athlete put the assembly on and secure it snugly. Next, lift the flap of the toilet seat, lined with temperstik, enough to visually line up the temperstik and the injured acromioclavicular joint. Use a felt-tipped marking pen to draw a hole on the temperstik that will, in effect, donut the acromioclavicular area. (Figure #2) After having the athlete remove the assembly, remove only the marked area of temperstik. The piece can be easily removed by cutting it out with a scalpel, however, make certain to cut only the temperstik and not the toilet seat. Depending upon the severity of the injury, a second piece of temperstik may be added.

The third phase of construction involves the fitting of the orthoplast shield. Have the athlete put on the assembly. Taking a piece of hard, unyielding foam, cut out a circle, larger than the hole cut in the temperstik. Place the foam circle on top of the toilet seat and secure it directly over the acromioclavicular joint, temporarily, with adhesive tape. (Figure #3) Next cut a sheet of orthoplast 7” by 24”. Place the orthoplast in hot water (140-160 degrees F.) and allow it to soften until pliable. The water in a standard hydroculator unit works adequately. Remove the orthoplast from the water and dry it.

Mold the orthoplast to the toilet seat assembly, lining one edge of the sheet with the distal, superior edge of the pad. At this time, while the material is still pliable, remove excess with scissors, making sure to allow enough room around the neck during shoulder abduction to avoid pinching. Allow the orthoplast to cool enough to be removed without distorting the shape. Applying cold packs will help facilitate cooling. Carefully remove the orthoplast shield and immerse it in ice water to complete the hardening of the material. Remove the hard foam circle from the toilet seat assembly. Remove the orthoplast and dry it. For added comfort and protection to the neck, apply a layer of moleskin along the proximal edge of the orthoplast. Using a fast-setting, permanent cement, secure the orthoplast shield, aligning the raised portion over the acromioclavicular joint. Finally, cover each of the interior posts with moleskin to protect the athlete.

Summary

The pad is now ready for competitive wear under any pair of standard shoulder pads. (Figure #4) It provides maximal protection, comfort, and mobility without sacrificing any of them. This pad can be constructed with ease and at relatively little cost, since most of the materials are readily available.

Editor's Note: Anyone wishing to have an idea, technique, etc. considered for this section should send one copy to Ken Wolfert, Miami University, Oxford, Ohio 45056. Copy should be typewritten, brief, and concise, using high quality illustrations and or black and white glossy photos.
Potpourri

Exercise and Orthotics

According to Karl Klein in the March-April 1979 issue of "The American Corrective Therapy Journal," the following exercises are used to great advantage with orthotic devices to prevent excessive pronation in the foot during running.

First: Sit with knees flexed to about 115°, feet 3-4 inches apart, foot-ankle angle about 90°, toes pressed together, fists between the knees. Lock heels on the floor, press toes together hard, and squeeze the knees together against the fists with maximum effort. Hold ten seconds — relax. Repeat 4-5 times in series, 2-3 times daily. This exercise strengthens the muscles on the inside of the ankle (tibialis posterior and flexor hallucis longus) and aids in controlling pronation. The knee squeeze phase strengthens the muscles that turn the lower leg in.

Second: Stand facing wall, outer borders of feet parallel to each other. Pull ankles up on inside via muscle action; keep big toe on the ground. Lean against the wall, knees straight. MILD, MILD stretching of the gastroc muscle. Hold 50 seconds — relax. Repeat 4-5 times in series.

Third: Maintain the same foot position as second exercise but straighten arms, bend knees, and keep heels on the floor. This stretches the lower calf muscle (soleus) better than the straight leg position above. Hold, repeat as before. This is a very important stretcher for runners.

Sex Differences

The October, 1979 issue of the "Physical Fitness Research Digest" examined physical and motor differences between the sexes. Such differences do exist and have significance for participation in physical education and athletics and for work assignments that are physically demanding. This problem is confounded by complications related to existing differences being due to biological or cultural factors or both.

The following are general observations made by their study:

a. Biologically, the greatest differences between the sexes occur from puberty through the active reproductive years when sex hormones are at their greatest levels. During this period, males have a higher level of androgen, which promotes greater muscle mass, larger and denser bones, and increased power to give them a distinct advantage over females in situations demanding strength, speed, power, and stamina. Females have a higher estrogen level, which shortens their growing period and increases fat tissues; the general result is a smaller and less powerful person. While some females are capable of performing in vigorous physical activities at higher levels than some males, the overall advantage is definitely with males.

b. Women at all ages are much more endomorphic than men and are heavier in proportion to stature. Men possess more mesomorphy.

c. Girls reach pubescence about two years earlier than boys: girls around ages 11 and 12 years and boys around ages 13 and 14 years.

d. Structure. The differences between boys and girls are not pronounced on most structural measures before girls' adolescence is reached, although boys have some advantages, especially in arm length. The girls surge ahead until boys enter adolescence, after which the boys show the following pronounced superiorities: taller and heavier bodies, longer arms, broader shoulders, and narrower hips, longer legs in proportion to height, larger skeletal muscles, and larger hearts and other internal organs. Girls have more adipose tissue at all ages than do boys and are about two years in advance of boys in skeletal ossification.

e. Males have higher ratios of strength to body weight, although the ratios favor women when expressed relative to lean body weight. Compared with college men, college women are much weaker in arm strength than in leg strength.

f. Flexibility. As evaluated by the floor-touch test, girls of all ages have greater trunk-hip flexibility than boys.

g. Males have a greater heart size, greater blood volume per heart beat, and a slower heart rate.

h. Men's maximum oxygen uptake is around 10% to 20% greater than in women, this differential is 20% to 25% in trained athletes.

i. Men between ages 20 and 30 years have about 15% more hemoglobin per 100 milliliters of blood and 6% more erythrocytes per cubic millimeter than women, a situation which provides greater oxygen-carrying capacity in men.

j. Boys are superior to girls at all ages in such motor ability elements as reaction time, balance, sprinting speed, agility runs, muscular power, situps, distance throws, and stunt-type tests (Brace Test). The differences between the sexes are much greater following adolescence.

k. Men and women in weight training programs make gains in strength and lean body weight reductions in body fat. Men are stronger than women at the start of such regimens and remain so at the end; percentage gains on strength measures, however, are comparable for the two sexes. Hypertrophy of muscles does take place, especially in the arms, but is much more pronounced in men. In the past, there has been a concern that weight training in females would produce bulging muscles to the extent that they would be masculine in appearance; this concern is unfounded, except in occasional females with naturally high endogenous levels of testosterone.

Editor's note: See Mid-Year Board minutes under American College of Sports Medicine liaison report for more on this. — K.W.
International "Sport Corps"

The United States Sports Academy at the University of South Alabama in Mobile, Alabama has been approached by several foreign governments to develop a “Sports Corps” organization to assist developing nations in designing and implementing physical education and athletic programs. Such an organization would be similar to the Peace Corps concept.

The Sports Academy is now accepting resumes from individuals interested in such a volunteer program. It is anticipated that volunteers in the “Sports Corps” program would be provided with transportation, room and board, a moderate stipend and a medical package. Funding for the program would come primarily from the participating foreign governments. A limited amount of supervisory personnel will also be needed.

The Academy invites comments and suggestions on the concept and development of the “Sports Corps” program.

Posture and Disease

The January, 1979 issue of “Physical Fitness Research Digest” reported the following significant results in the study relating to posture:

A. Slight tendency for physical fitness and motor ability to be related to posture; B. History of cardiac and pulmonary affections accompanied inclination of the pelvis in college women; C. Constipation and back pain found with increased inclination of the pelvis; D. Dysmenorrhea occurred with greater severity among college women with sway-back posture; E. More previous diseases, fatigue and underweight and greater tendencies toward self-consciousness, restlessness, and timidity among poor than among good posture groups of elementary school children.

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All the rubdowns and the bills unpaid.
Ankles in buckets, oh, so cold,
Bones that feel so brittle and old.
A jammed finger or wobbly knee,
Ice may help or some surgery.
A strained tendon or muscle pull,
Loose ligaments or none at all.
Swimmers and their rotator cuffs
Yes, the trainer sees all that stuff.

The trainer is a special breed,
To help the athlete fill a need.
You must give up precious free time,
Dedication - that’s the real line.
You care enough to try your best,
And hope that all will suffer less.
Not too modest or conceited,
You just know that you’ll be needed.
There are times when there’s not enough,
And others when there’s just too much.
You tape them up and send them out,
And wonder what it’s all about.
Yet, you still do it, because it’s fun,
Yes, a trainer’s work is never done

Martha Godfry
Student Athletic Trainer
Old Dominion University

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In Memoriam

SAYERS J. "BUD" MILLER

Sayers J. “Bud” Miller Jr., Athletic Trainer and Assistant Professor of Health and Physical Education at Penn State University, and Chairman of the NATA Professional Education Committee, died suddenly on April 3, 1980, he was 49.

“Bud” was the guiding force behind the professional preparation and certification improvements for the NATA. He spent countless hours visiting, consulting, planning and guiding new curriculum programs in colleges throughout the nation; while still authoring numerous articles, projects and workshops which were directing lines making the backbone of the present standing of Athletic Training in our college curriculums today.

His undergraduate and Master’s work were earned at Purdue University, followed by his Physical Therapy Certificate at the University of Pennsylvania, and he completed all but his Doctorate dissertation at Stanford University in the following years.

On his first job he was a high school teacher for one year followed by another year in a hospital as a Physical Therapist. This was followed by a year as Trainer at Moorhead State and then 10 years as Assistant Professor of Physical Education and Head Athletic Trainer and Physical Therapist at Ball State University.

In 1969 he moved to the University of Washington as the Head Trainer. From 1972 to 1974 he was the Director of District #10, and was nominated for the position of President of the NATA in 1974.

Since 1974 he has been at Penn State where he was also Coordinator of NAIRS until 1978, the President of the Sports Safety and Health Care Society, as well as being the NATA liason to the AAHPER. He belonged to numerous other organizations such as the EATA, Pennsylvania Athletic Trainers Society, APTA and the American College of Sports Medicine. A recent honor was selection as a member of the Athletic Therapy Staff for the 1980 Winter Olympics at Lake Placid.

“Bud was a man who daily invested his life into others, he lived to give of himself. His expertise in his field, his wisdom in working and communicating with people, and his jolly and encouraging character were all attributes that drew people close to him. His family, students, colleagues, and friends have all been blessed with the fruits of his life’s work and have been influenced and motivated to sow the same seeds of love and dedication in their endeavors. Much of Bud’s character is engrained in his students who continue to strive for the excellence that Bud exemplified. Yes, we have lost a man very dear to our hearts, but we’ll never outlive the joy of knowing and remembering his love for people.”

Bob Deppen, Student
Penn State University

“Bud” is survived by his wife Shirley, one son, John and two daughters Laurie and Kristie.

The numerous positions, affiliations, consultations, authorships and visitations speak well enough of his un­tiring, unselﬁsh way he gave of himself to his profession. Athletic Training was driven to it’s improved professional status by him, and we will sorely miss Sayers “Bud” Miller Jr.
In Memoriam

HERMAN McGEE

Herman McGee, 61, of Clemson University for the past 46 years, died March 9, 1980 from undetermined causes.

McGee, who came to work with the athletic department in March, 1934, had the longest tenure of anyone in the department. The Pendleton, South Carolina, native served as Assistant Trainer from 1934 through 1948 and was Head Trainer from 1948 to 1957. He assumed the duties of equipment manager and reverted to assistant trainer in 1957, a dual capacity he held until 1969. At that time he returned to the training room where he worked for the past eleven years.

Herman was recognized in June, 1965, by the National Athletic Trainers Association "for 25 or more years of meritorious service in the field of athletic training." He was made an honorary associate of the Alumni Association of Clemson University on October 7, 1978.

McGee was born in Clemson, South Carolina, September 11, 1918. He graduated from Riverside (now Pendleton) High School and later served four and a half years in the infantry and quartermaster corps. McGee had been a widower for six years.
Max Angiel, age 76, died suddenly at his home in Woodstock, New York on November 1, 1979. He had worked part time at Columbia University as an Athletic Trainer from 1926 to 1970 when he retired, working with various sports such as basketball, track and fencing. His BS and MA degrees were earned in France.

Max is survived by his wife Fernande and two sons Serge and Pierre. He was a retired member of the NATA.
Phonophoresis: A Review of the Literature and Technique

Phonophoresis, a technique whereby whole molecules of medication are drive subcutaneously by ultrasonic application, has been an infrequently utilized treatment protocol in Sports Medicine despite the fact that reports of the procedure's clinical efficacy have appeared in the literature for over twenty-five years. The purpose of this article is to provide a brief review of ultrasonic therapy as it applies to phonophoresis, to review the clinical concept of phonophoresis with reference to indications and technique, and to review the literature pertaining to the procedure.

Ultrasound

It is beyond the scope of this paper to provide an in-depth discussion of the biokinetics of ultrasonic wave propagation and bodily effects. The writings of Griffin, Lehman, and Shriber are available on these topics. Commercially available ultrasound units generate waveforms at therapeutic frequencies of from .7 to 1.1 megacycles. The thermal, mechanical and chemical alterations of biologic tissue produced by ultrasonic waves provides the basis for medication to be introduced into the body. Associated bodily responses such as selective tissue heating, alteration of cellular membrane permeability, variance in nerve conduction velocity, and decrease in collagen material viscosity also play an important role in the symptomatic relief produced by therapeutic ultrasound. It is the unique aspect of phonophoresis that the entire molecule of medication is driven into the tissue by the wavetrain as contrasted with iontophoresis where ions of medication are driven subcutaneously by an electrical current. Penetration of medication via phonophoresis of up to six centimeters has been reported.

Phonophoresis Technique

Indications for phonophoresis are essentially those of therapeutic ultrasound. It acknowledges the limitations imposed with the systemic introduction of specific medications. Further, one writer has suggested the precaution of treating only extremity pathologies to minimize the beaming of medication into internal organs. Another has limited treatment frequency to twice a week to prevent adrenal gland suppression.

All reported clinical trials of phonophoresis have utilized a continuous ultrasound waveform; the coupling medium being the medicinal preparation with either a cream or petrolatum base. The treatment area should be well localized, washed thoroughly to remove skin oils, preheated, and a 3 to 5 mm. thick layer of preparation evenly applied to the surface. Bony prominences or other irregular surface areas may be treated by immersion in 33°C water baths using good underwater coupling technique. Intensity is dependent upon patient tolerance and the area under treatment. The dosage should rarely exceed the accepted therapeutic maximum of 2.5 watts/cm². Treatment time should be 5-6 minutes except in those cases where total surface area exceeds 100 square centimeters. Separate fields should be established to insure adequate coverage when larger areas are under treatment. Steady linear or circular stroking applications have both been advocated. At the conclusion of the treatment excess preparation should be carefully removed from the treatment surface. Successful regimens have ranged from 3 to 9 treatment sessions, with twice a week to daily frequencies. As with any comprehensive treatment program, exercise and functional activities within the patient's pain tolerance should be initiated as soon as feasible.

Hydrocortisone (cortisol) which is utilized in the vast majority of phonophoresis treatments is initially applied in topical form and with its systemic introduction is the active agent in the procedure. Hydrocortisone is a powerful medication which the physical therapist/athletic trainer should thoroughly acquaint themselves with prior to patient treatment. The local or systemic introduction of hydrocortisone in therapeutic dosages can significantly alter the body's inflammatory response. The medication has been utilized in the treatment of tendonitis, epicondylitis, bursitis, neurofibromas, and other myofascial pathologies. Collagen diseases, gout and various dermatoses have also been listed as indications for steroid therapy. Administered during an inflammatory reaction, hydrocortisone inhibits the release of cytototoxic enzymes, reduces antigen-anti-body reactions and retards the formation of granular and scar tissue.

Side effects of cortisol toxicity include increased stomach acid production with nausea and possible ulceration. Hydrocortisone, by depressing the inflammatory response will enhance the spread of infection in certain pathologies. The prolonged application of steroids to loadbearing structures (i.e. tendons and ligaments) can lead to their failure under stress.

Review of the Literature

Reports have appeared in the literature since 1954 establishing the efficacy of ultrasound phonophoresis. Early investigators utilized ultrasound to disseminate injections. Over the years the technique has been modified to the use of topical medications. In 1954, Aldes reported favorable results on the treatment of common articular orthopedic conditions such as arthritis and bursitis with injected hydrocortisone followed by ultrasound therapy. In
A series of 225 cases of subdeltoid bursitis treated with a combination of injection and ultrasound, Newman et al. found that ultrasound combined with injectable hydrocortisone yielded improved results over a simple injection. Coodley's study of 1960, involving patients with diagnoses of bursitis and post-traumatic lesions who were treated with intraarticular hydrocortisone and ultrasound reported similar findings. In 1963 Mune utilized therapeutic ultrasound to disseminate subcutaneous infiltrations of a local anesthetic.

The most definitive research to date has been conducted by Griffin, Touchstone and co-workers utilizing swine tissue as human homologues. They demonstrated that therapeutic ultrasound could drive molecules of topically applied hydrocortisone preparation into both paravertebral muscle and nerve. In 1968, tissue cortisol concentrations resulting from three separate treatment intensities were compared. A low intensity, long duration (.3 watts/cm² for 17 minutes in this study) treatment yielded the highest cortisol recovery levels. Again in 1972 Griffin et al. investigated the effect of ultrasound frequency on phophoresis of cortisol into swine. Using ultrasound generators producing frequencies of 90, 250, 500, 1000, and 3600 kilocycles placebo and 10% hydrocortisone preparations were driven into pig tissue at a standard intensity of 1 watt/cm², for 17 minutes. Nerve and muscle tissues receiving treatment at the 250 kilocycle frequency exhibited the greatest cortisol recovery. It is interesting to note that the lowest cortisol values were recorded in the tissues treated with the 1000 kilocycle (1 megacycle) frequency; that frequency in most common clinical use today.

Clinical trials of ultrasound phosphoresis have been limited in number and design. In 1967 Griffin, Echternach and Price in an extensive double-blind study compared a hydrocortisone phosphoresis treatment to an ultrasound and placebo treatment in a series of 102 patients. Patients were selected on the basis of chronic diagnoses of osteoarthritis of the shoulder and knee, bursitis of the shoulder, bicipital tendinitis or epicondylitis of the elbow. Each patient received up to a total of nine treatments, at a frequency of 1 megacycle with intensity to tolerance but not exceeding 1.5 watts/cm². Treatment time was five minutes for each 25 square inches of surface area. Evaluative criteria for patient improvement included a decreased sensation of pain concomitant with an increase in active range of motion. On this basis patients were categorized as either improved, partially improved or unimproved. Of the 102 patients in the series, 66 were treated with ultrasound and hydrocortisone. Thirty-six patients received the placebo treatment. 68.1% of the patients treated with phosphoresis were judged improved with 27.7% of those receiving the placebo were also evaluated as improved.

Kleinkort and Wood reported retrospectively on a series of 285 patients with a variety of common inflammatory orthopedic conditions who were treated phophoretically with either 1% or 10% hydrocortisone preparations. The 10% preparation was found to be superior on the basis of patient improvement, although patient improvement was noted with both concentrations. The results of this study supported the empirical choice of the 10% concentration by other investigators.

Most recently Moll, using a steroid/lidocaine preparation treated 52 chronic back pain patients with symptoms unresponsive to other conservative modalities. Patients identified “trigger point” areas of referred pain and received either steroid/lidocaine ultrasound phosphoresis or placebo treatments. The study demonstrated a statistically significant difference (88.1% versus 23.1%) in patient improvement from the phosphoresis after only six treatments.

Conclusion

Phosphoresis offers a safe, painless alternative to subcutaneous injection in indicated inflammatory conditions. Needlephobia and the hazards of infection and tissue trauma are minimized. With knowledgeable application phosphoresis can be a valuable tool in treating sports related injuries.

Bibliography

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For Ski Jumping

Most people in the athletic training profession are not that familiar with skiing injuries. One method of skiing is freestyle which consists of three events: ballet, moguls, and aerials. “Aerials” are stunts performed, as the name implies, in the air. The participant skis off a platform at approximately 15 miles per hour, performs the stunt in the air, and lands on the natural incline of the slope. This activity will exert certain repeated stresses to the body and the tip that follows may help prevent or lessen the after affects of this stress.

The chronic injury most commonly seen in those performing aerials is that of a boot top contusion anteriorly on the distal third of the tibial shaft. This contusion is the result of the landing phase of the aerial stunts. Repeated direct trauma occurs as the full body weight, exacerbated by downhill inertia, is driven into the boot, forcing dorsiflexion at the ankle joint. Since the boot is designed to limit dorsiflexion/plantarflexion (as well as inversion/eversion), the full force of the landing is taken at the boot top and the tibial shaft. With each practice jump, the shin absorbs the force of perhaps 135 pounds of body weight being resisted by a plastic immobile boot top. A competitor practices in the neighborhood of 15-20 jumps daily. Repeated forces of this kind can cause traumatic conditions beyond a simple contusion such as periosteal bruising, stress fractures and exostoses.

A simple protective device, a plastic padded field hockey shin guard, (Figure #1) is extremely effective in preventing and protecting the anterior border of the tibia during aerial events. The shin guard is inserted inside the outer sock and may be secured with a strip of tape midway around the leg, but does not necessarily require taping in order to remain in position. If the individual wears only one heavy sock, the device should be placed directly over the sock. (Figure #2) Be sure that the lower half of the shin guard is pushed within the boot as the individual stands upright. However, caution is advised against pushing the guard too deeply (within the boot) as the bottom will pinch the shin during forced dorsiflexion and the individual will be unable to secure the boot with the proper tension at the instep buckles. The upper buckles should be adjusted to accommodate the additional bulk and still remain snug.

This simple protective technique acts to dissipate the violent forces placed on the shin by the boot (Figure #3). It should be used regularly in aerial practice and competition to avoid periosteal contusions and other traumatic conditions.

Editor’s Note: Anyone wishing to have an idea, technique, etc. considered for this section should send one copy to Ken Wolfert, Miami University, Oxford, Ohio 45056. Copy should be typewritten, brief, and concise, using high quality illustrations and or black and white glossy photos.

Ms. Holland is director of the under-graduate Athletic Program at the University of New Hampshire, Durham, New Hampshire.
PROCEEDINGS of the
NATIONAL ATHLETIC TRAINERS ASSOCIATION
MINUTES OF BOARD OF DIRECTORS
February 10-11, 1980
Fort Worth Hilton Hotel
Fort Worth, Texas

SUMMARY OF ACTIONS
NATA BOARD OF DIRECTORS

The following agenda items were considered and actions taken by the NATA Board of Directors at its meeting held at the Fort Worth Hilton Inn, Fort Worth, Texas, on February 10, 1980, commencing at 3:35 p.m., Mr. William H. Chambers, President, presiding and with the following present:

Mr. William H. Chambers, President
Mr. Otis Davis, Executive Director
Mr. Wesley Jordan, District 1
Mr. Richard Maharea, District 2
Mr. Andy Clason, District 3
Mr. Gordon Stoddard, District 4
Mr. Frank Randall, District 5
Mr. Cash D. Birdwell, District 6
Mr. Troy Young, District 7
Mr. Donald Chu, District 8
Mr. Bobby Barton, District 9
Mr. Gary Craner, District 10

I. AUDIOVISUAL AIDS:

Moved by District 3, seconded by District 4 that the report be accepted for informational purposes. (Carried 10-0)

II. CAREER INFORMATION SERVICES:

Moved by District 1, seconded by District 9 to approve Fred Kelley and Bob Behnke as members of the Committee. (Carried 10-0)

Concerning a request from District 4 to make the career brochure available to more curriculum and career directors at no cost, it was moved by District 1, seconded by District 5 that the career brochures be made available to curriculum and apprenticeship directors at no cost, with the provision that they are to write and request them and upon request there is no limit to the number they can request. (Carried 10-0)

III. CERTIFICATION:

Moved by District 2 and seconded by District 8 to initiate the fee schedule as recommended by the Board of Certification. (Carried 10-0)

Moved by District 5, seconded by District 6 that the new fee structure for certification of candidates as recommended by the Board of Certification be enacted for all tests given after March 23, 1980. (Carried 9-0, with District 7 being in opposition)

Moved by District 8 and seconded by District 5 that the Certification Committee be convened to standardize their policy and procedures regarding the restating of failures of the certification examination and this should include not only wait periods between failures but also standardizing the policy when considering an off site testing facility. (Carried 10-0)

IV. DRUG EDUCATION:

Moved by District 1, seconded by District 2 that if the NCAA Drug Education Committee requests a trainer to serve on the Committee, that the Chairman of the NATA Drug Education Committee, Mr. John Wells, be appointed as liaison. Following discussion as to the authority of the President to appoint liaison representatives, District 2 withdrew his second to the motion and there being no further seconds, the motion at its meeting held at no a second.

Moved by District 9, seconded by District 3 that ashtrays not be provided in the clinical sessions and that there will be no enforcement of the no-smoking provision. Motion then made by District 9, seconded by District 3, that ashtrays not be provided at the 1980 and future NATA meetings and clinical symposia. (Carried 9-1, #7 opposed)

V. ETHICS:

Motion made by District 8, seconded by District 2 to reject the January, 1980 revision of the Code of Ethics, with instructions to review and return to the Board in June of 1980, with the following sections to be reviewed: Article I, Section 7, Article II, Section 4 and Article III, Section 2 (Carried 10-0)

Motion made by District 10, seconded by District 9 to make a Bylaws change to Article XIV, Section B, adding an item to provide for instructions to the Ethics Committee to review the Code of Ethics periodically and make recommendations to the Board of Directors concerning changes. (Carried 10-0)

Concerning the Temple-Penn Case, the report was accepted as information, with no action being taken.

Concerning the Ethics Questionnaire, there being no action to report, the matter was, by common agreement, tabled until the June session of the Board.

Concerning the Ethics matter involving Gerald Hoffman, a motion was made by District 8, seconded by District 9 to submit this case to the Ethics Committee. (Carried 10-0)

VI. GRANTS AND SCHOLARSHIPS:

Motion made by District 1, seconded by District 2, to approve items 1 through 6 of the Committee's Report. (Carried 10-0)

TO: The Board of Directors, N.A.T.A.
Otis Davis, Executive Director
Bill Chambers, President

FROM: Committee on Grants and Scholarship

Regarding Semi-Annual Report - January 1980

The Committee submits for the Board's approval the following report of items:

Item No. 1: Monies have been placed with the Delaware Management Co., Inc. to obtain a higher interest accumulation. Monies that are currently in certificates of deposit have been left to mature.

Item No. 2: A check for $630.00 has been received from the 1979 Convention in St. Louis. A check for $2,000.00 will be received from Mary Edgerly.

Item No. 3: Scholarships presently assured for the 1980 June meeting are:

N.A.T.A. - Undergraduate, Graduated and Robt. H. Grant
N.A.T.A. Undergraduate, Graduate and Postgraduate
Schutt Manufacturing Co. - Postgraduate
Pro Orthopaedic Devices - Postgraduate
Johnson and Johnson Products - Undergraduate
Chattanooga Pharmacia Co. - Undergraduate
Mueller Company - Achievement Award

Item No. 4: The Committee asks that the Eddie Wojcick Award be presented to the recipient of the Student Trainees Award Banquet in the future rather than the Association Banquet. It can be a meaningful inspiration to the young and the student trainers who are yet to be certified.

Item No. 5: "Article 3 Membership Committee on Grants and Scholarship - Articles of Operation states that the membership shall not be less than twelve." The following have indicated a desire to actively assist: Gene Monahan, athletic trainer, New York Yankees; Cliff Fagan, former executive director of NPSHESA'; C. Carson Corbin, legislative director; President's Council on Physical Fitness in Sports; John Sclera, ATC, State University of New York at Cortland. The chairman asks permission to contact these men to see if they would serve the committee.

Item No. 6: The Committee's feeling is that the supervising trainer should more greatly influence the selection of the award recipients. The nomination folders now provide them with a greater responsibility.

The Committee's work on Grants and Scholarship is progressing satisfactorily and we have no other report to make at this time.

William E. Newell
Grants and Scholarship Committee

VII. HISTORY AND ARCHIVES:

The Board was informed as to the present status of the History Book, namely, that it was presently at the printer's and that no definite price had been set for its sale due to the fact that nobody as yet had seen the complete book.

VIII. PROFESSIONAL EDUCATION:

Motion made by District 1, seconded by District 1 to accept Items 1 and 2 of the Committee's December 12th report to the Board for informational purposes. (Carried 10-0)

Motion made by District 4, seconded by District 3 to approve the recommendation of the Committee that the University of North Carolina request for postponement of on site visitation due to lack of funds be approved. (Motion carried with 7 in favor, District 9 being in opposition and Districts 7 and 8 abstaining).

The Board rejected the recommendation of the Committee to reject Arizona State University's request to postpone their on site visitation by the NATA for one year due to a change of program directors on the present athletic training staff, with Districts 1, 2 and 8 voting in favor and Districts 3, 5, 6, 7, 9 and 10 voting against.

Motion made by District 2, seconded by District 6 that the undergraduate level athletic training education program offered by William Patterson College be approved. (Carried 9-1, with District 8 abstaining)

Motion made by District 4, seconded by District 9 that the Board of Directors approve the action of the Professional Education Committee of placing the following schools upon probation if they fail to submit the required self evaluation materials by January 30, 1980, with the effective date of this probation to be February 1, 1980:

North Dakota State University; Eastern Kentucky University; Stephen F. Austin State University; Arizona State University; Brigham Young University; Lamar University; New Mexico University and West Chester State College. (Carried 9-0-1, with District 6 abstaining)

Motion made by District 8, seconded by District 6, that the Board of Directors approve the booking of a complimentary copy of the Proceedings of the 1978 Professional Preparation Conference to the ERIC Clearinghouse on Teacher Education for inclusion in their monthly journal of abstracts, but only if the NATA has final approval of the abstracts that will appear in this Journal. (Carried 10-0)

Concerning the recommendation that the Board of Directors approve Jack Redgren's proposal to make the NATA Continuing Education Program more efficient and at the same time provide the NATA member and professional preparation of the NATA membership. An amendment was offered by District 8 and seconded by District 5 that in view of the Professional Education Committee's desire to improve the quality of NATA approved athletic curriculums, that the Board of Directors desires that the Professional Education Committee seek a format
whereby all new curriculums will meet COPA standards for accreditation and that recommendations of the Professional Education Committee should be presented to the Board at its June meeting. (Amendment carried 10-0, as amended, was then likewise voted upon and carried 10-0.)

It was moved by District 7, seconded by District 8, to take Tables 2, 3, 4 and 5. (Carried 10-0)

It was moved by District 10, seconded by District 5, to create a CEP Subcommittee of District Representatives to work with Jack Redgren to check data on CEP, with one person from each district to be appointed by the Director, (Carried 10-0)

II. District Representatives to work with Jack Redgren to check data on CEU, with one person from each district to be appointed by the Director. (Carried 10-0)

1. Committee Membership:
   - Joanne Dolemaschin, Brown University (District #1) Project Director, Study of Curriculum Graduates
   - Phil Donley, Western Chester State College (District #2) Project Director, Accreditation
   - Al Proctor, Division of Sports Medicine, Department of Public Instruction, State of North Carolina (District #3) Chairperson, Sub-Committee on Experimental Programs
   - Ron Sondreson, Central Michigan University (District #4) Project Director, Study of Curriculum Annual Reports
   - John Schrader, Indiana University (District #4) Coordinator, Professional Preparation Conferences
   - Glen Snow, Floyd Central, Indiana High School (District #4) Coordinator, NATA Annual Meeting Workshops and Chairperson, Sub-Committee on High School Education
   - Dan Foster, University of Iowa (District #5) Director, Program Directors Council
   - Paul Zeek, Lamar University (District #6) Chairperson, Sub-Committee on Undergraduate Education
   - Gary Delforge, University of Arizona (District #7) Chairperson, Sub-Committee on Graduate Education
   - Tom Diehm, University of New Mexico (District #7) Project Director, Ethical Standards for Education Programs
   - Leon Skeie, Orange Coast College (District #8) Chairperson, Sub-Committee on Educational Publications
   - Jack Redgren, Vanderbilt University (District #9) Chairperson, Sub-Committee on Continuing Education
   - Lou Osterign, University of Oregon (District #10) Coordinator, Visit Team Training and Procedures
   - Dennis Reeky, University of Washington (District #10) Chairperson, Sub-Committee on Educational Displays

Activities and Action Taken

A. Meetings
   The last meeting of the Professional Education Committee was held at the Stouffer's Riverfront Towers in St. Louis, Missouri on June 14, 15, 16, 1979. A report on the Committee's activities and requests developed from this meeting was presented as acted upon by the Board of Directors at their June meetings in St. Louis. Although several telephone conversations have been held between Committee members and a considerable number of written communications, requests and proposals have been reviewed by the Committee since the June meeting, most of these items of business have not been acted upon as a Committee as a whole. This report will be limited to those few actions taken by the Committee and the agenda item to be discussed and acted upon at our next Committee meetings to be held on January 3 and 4, 1980 at the Opryland Hotel in Nashville, Tennessee. An addendum to this report including recommendations and requests for action to be taken by the Board of Directors developed at the January meetings of the Committee will be submitted to the Board for their review prior to their mid-year meetings. The Committee welcomes all members of the Board of Directors, Executive Director Otho Davis and President Bill Chambers to attend any or all of meeting sessions to be held in Nashville.

B. Activities and Action Taken
   Since the Committee's June Meeting, the following actions and activities have been carried out by the Professional Education Committee:

1. An on-site evaluation of the William Paterson College athletic training education program was carried out to complete the Committee's evaluation procedures required of this program. Final action in regards to the approval of this education program will be taken by the Committee at its January meeting. This on-site visitation had to be carried out during the fall since we did not have sufficient time last spring to carry out this final step of our evaluation procedures.

2. The Committee has reviewed a request from the University of North Carolina that asks for postponement of their on-site visitation by NATA from the spring to the fall along with an extension of the approval of their program until this on-site evaluation can be carried out. Since this report is based upon the fact that all travel funds at this institution have been frozen for the 1979-80 school year and they would not be able to reimburse our visitation team's expenses, the committee feels that this request is legitimate and should be granted approval by the NATA.

3. The Committee has also reviewed a request from Arizona State University that asks for postponement of their on-site visitation by the NATA for one year based upon the fact that they have had recent staff changes which switched Troy Young from the position of program director to head athletic trainer and Joan Donnack, the women's athletic trainer, was selected to replace Troy as program director. It was felt that Ms. Donnack would require a year to prepare for the NATA on-site visitation because of her inexperience in her new position. However, it is the Committee's opinion by a vote of 10 to 5 that this request should not be granted since Ms. Donnack is not a new member of the athletic training staff and that the NATA evaluation would assist her to get acclimated to her new position and would help her to identify possible problem areas in their athletic training education program. Most of the Committee members feel that Arizona State University should approach the required NATA visitation with a positive attitude and not look at this requirement threatening the approval of their program. Every consideration would be given by the Committee in regards to the recent staff changes at Arizona State University.

C. Agenda for the Professional Education Committee's Mid-year Meeting in Nashville

1. Progress report on the NATA evaluation of the following schools seeking NATA approval of their athletic training education programs:
   - Undergraduate Education Programs (Zeek)
     - East Stroudsburg State College
     - North Dakota State University
     - Portland State University
     - Southern Mississippi State University
     - University of Delaware
     - State University of New York at Cortland
     - Eastern Kentucky University
     - Lock Haven State College
     - Stephen F. Austin State University
     - West Virginia University
   - Graduate Education Programs (Delforge)
     - Arizona State University
     - Brigham Young University
     - Lamar University
     - New Mexico University
     - Penn State University
     - Springfield College
     - Toledo University
     - West Chester State College
   - Education Programs (DelForce)
     - Canisius College
     - Mars Hill College
     - Southern Illinois University at Charleston
     - University of Wisconsin at La Crosse
     - Westfield State College
     - Miami University-Ohio
   - Education Programs (DeForce)
     - Old Dominion University
     - Illinois State University

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ATHLETIC TRAINING • Summer 1980
3. Review of the 1979 Annual Reports submitted by the NATA approved athletic training education programs. (Sende)

4. Finalization of the assignments to the on-site evaluation teams to carry out the final step of our evaluation procedures for those schools seeking NATA approval and reapproval of their athletic training education programs. (Osternig)

5. A preliminary report on the 1979 survey on the status of the curriculum graduates from NATA approved education programs. (Dolcemaschio)

6. If available, the 1979 Certification Examination results will be reviewed by the Committee. (Dolcemaschio)

7. A status report on the NATA approved high school faculty instructional programs in athletic training will be presented. The following institutions will be studied: (Proctor)
   a. Northwestern University
   b. Organization Medicine Department of Public Instruction, State of North Carolina

8. A report on the progress of the Professional Preparation Conferences will be presented to the Committee members including the following items of business: (Schrader)
   a. A report on the 1980 Professional Preparation Conference to be held in Nashville including program agenda, speakers, personnel needs and a preliminary financial and attendance report. (Schrader, Redgren & Miller) SEE ATTACHMENT A
   b. A report on the 1980 Professional Preparation Conference scheduled to be held in Palm Alto including program agenda, speakers, personnel needs and a preliminary financial and attendance report. (Schrader, Osternig & Delforge) SEE ATTACHMENT B
   d. Johnson and Johnson funding of the professional preparation conferences. (Miller)
   e. Preliminary plans for the 1981 Professional Preparation Conferences will be discussed. (Schrader)

9. A report on the progress of the Continuing Education Workshops to be held at the 1980 workshops will also be presented. (Snow)

10. A final status report on the program for the Program Directors Council Meeting to be held at Nashville will be presented. (Schrader)

11. The Professional Education Committee will discuss the restructuring of the NATA Continuing Education Program in regards to collecting and reporting Continuing Education Units. (Redgren)

12. A progress report will be presented in regards to obtaining the approval of the Council for Undergraduate Accreditation of our procedures for approving athletic training education programs. Guidance as to the direction and next steps that should be taken in regards to COPA and seeking national recognition of our athletic training curricular procedural modifications. (Schrader)

13. A status report on the development of the NATA's Distinguished Athletic Training Educator Award and criteria for being selected to receive this award will be presented at the Nashville meeting. (Schrader)

14. No reports will be presented at the Nashville meeting in regards to educational display of publications and ethical standards as they are involved in the implementation of athletic training education programs. (Osternig)

15. A preliminary report on the financial condition of the Professional Education Committee is scheduled to be presented and discussed with the members of the Committee. A tentative 1980-81 Budget will also be developed and discussed at this meeting. (Miller)

16. Other new business that may be discussed if sufficient time is available at the Nashville meeting:
   a. The need for a national office and a full time staff to assist the Professional Education Committee in carrying out its activities and maintain good communications with the NATA membership. (Donley)
   b. The upgrading of the professional preparation of student trainers applying to qualify via the apprenticeship route of the NATA Procedures for Certification. (Osternig)
   c. The proposed development of a diagnostic test to be administered to curriculum programs. (Donley)
   d. The primary item of business to be discussed and studied at the Nashville meeting will be proposed amendments to the following NATA educational documents:
      a. Guidelines for the Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs
      b. Guidelines for the Development and Implementation of NATA Approved Graduate Level Athletic Training Education Programs
      c. NATA Behavioral Objectives
      d. NATA Skill Competencies
   e. Recommendations from the Quail Boost Conference will also be reviewed by the Committee for possible incorporation in the official documents of the NATA.

III. Committee Recommendations and Requests for Board of Directors

A. It is recommended that the NATA Board of Directors approve the University of North Carolina's request for the postponement of their on-site visitation by the NATA from Spring 1980 until Fall 1980 due to the freezing of funds for travel. In addition the Board should also approve the extension of the NATA undergraduate athletic training education program for one year.

B. It is recommended that the NATA Board of Directors reject Arizona State University's request to postpone their on-site visitation by the NATA for one year due to a change of program directors on the present athletic training staff.

C. There are no other Committee requests or recommendations for the Board of Directors to act upon at the present time. All additional requests or recommendations of the Professional Education Committee will appear in an addendum to this report. A copy of the addendum will be submitted to each member of the Board of Directors prior to January 25, 1980 for his or her review.

PROFESSIONAL EDUCATION COMMITTEE
National Athletic Trainers Association

Addendum Report to the Board of Directors
January 6, 1980

Sayers "Bud" Miller, Chairperson
The Pennsylvania State University

The information and recommendations for action to be taken by the NATA Board of Directors presented in this addendum report from the Professional Education Committee's recent meetings held at the Opryland Hotel in Nashville, Tennessee on January 4, 1980. The following members of the Professional Education Committee were in attendance at this mid-year meeting:

Gary Delforge
Joanne Dolcemaschio
Phil Donley
Jack Redgren
Leon Skeie

Dan Foster
Glen Snow
Paul Zeek

Sayers "Bud" Miller
Ron Sayers was unable to attend this meeting due to illness in his family. Tom Diehm was called before the grand jury about the recent University of New Mexico basketball scandal, and was unable to attend the Meeting. Lou Osternig was "fogged in" at San Francisco during his travels to the meeting and failed to reach Nashville. Dennis Sayers was unable to attend due to staff shortage and a lack of a replacement to cover basketball games for him.

I. Activities and Action Taken at the Mid-year Meeting

A. The Committee reviewed the self-evaluation materials and the on-site evaluation report of the William Paterson College Curriculum Guidelines program since we did not have sufficient time last Spring to carry out the on-site visitation. This visitation was carried out during the first part of October. The review of the education program focused on the requirements of the NATA undergraduate Curriculum Guidelines. Consequently, the Committee recommends that the NATA approve the Bill Paterson athletic education program of the William Paterson College.

B. The Committee reviewed the progress of schools seeking NATA reapproval of their athletic training education programs in submitting the required self-evaluation materials. The following schools were found to have completed this requirement:
   East Stroudsburg State College
   Southern Mississippi University
   Lock Haven State College
   Portland State University
   University of Delaware
   West Virginia University
   State University of New York at Cortland
   East Stroudsburg State College

The following schools have not completed this requirement and will be notified of this fact one more time indicating that they have until January 30, 1980 to complete the NATA requirement or be placed upon probation effective February 1, 1980:
   North Dakota State University
   Eastern Kentucky University
   Stephen F. Austin State University
   Arizona State University
   Brigham Young University
   Lamar University
   New Mexico University
   Springfield College
   Toledo University
   West Chester State College

C. The Committee also reviewed the progress of schools seeking initial approval from the NATA for their athletic training education programs in submitting the required self-evaluation materials. The following schools were found to have completed this requirement:
   Bridgeport University
   Canisius College
   Mars Hill College
   Westfield State College
   Southern Illinois University at Carbondale
   University of Wisconsin at LaCrosse
   Old Dominion University (Graduate Program)
   Illinois State University (Graduate Program)
   Miami University at Oxford, Ohio failed to submit all of the required self-evaluation materials and will not be considered for NATA approval in 1980.

D. In light of the problems that the Committee has had in obtaining the required self-evaluation materials from the schools seeking NATA reapproval this year, the Committee has decided to provide these schools with an earlier notification of their responsibilities in obtaining this reapproval. The letter of notification will be sent out during January prior to the year that NATA reapproval must be obtained instead of June or July. A second reminder in the form of a letter will be sent in June to ensure that all schools receive the information.

E. The Committee was unable to review the 1979 Annual Reports submitted by the NATA approved athletic training education programs due to the absence of Ron Sayers. Consequently, Ron will send to each Committee member a list of schools in their district that are in violation of NATA requirements or provide questions in regards to the completion of the report. The Committee will review the violations or problems with the respective school officials before any official action in regards to the status of the school's educational program will be recommended.

F. Since Lou Osternig was unable to reach Nashville, the Committee was unable to finalize the assignments to the on-site evaluation teams for those schools seeking NATA approval or reapproval and had completed the requirements of the self-evaluation procedures. Gary Delforge and Paul Zeek will contact Lou Osternig in finalizing the members of the NATA visitation team for each of the schools that has completed all of the other NATA requirements and is in turn notified by the appropriate school officials about the specifics of the visitation and evaluation team members of their selection to carry out a specific on-site visitation.

G. Joanne Dolcemaschio reported the results of the 1979 Survey on the Status of the Curriculum Graduates from NATA Approved Education Programs. The results indicate a very small increase in the number of graduates from NATA approved curriculums during 1979 as compared to 1978. There was no change in the percent of graduates being employed in the field of athletic training. This figure remains at 90 percent with 14 percent of the graduates continuing their schooling and 5 percent of the graduates being unemployed. Most of the program directors indicated very few problems in placing students in athletic training positions if the student actively sought a job as an athletic trainer or teacher. A few of the common problems, who are program directors, noted that their graduates were more successful in locating athletic training positions than physical education majors in finding a job in their field. It was moved that we conduct a survey all of our program directors to see if this situation is true nationally or only the findings of three schools scattered across the nation. Gary Delforge was assigned to carry out this project and report the findings at our June meeting.

H. Joanne Dolcemaschio also reported that the NATA Certification Examination results for the entire year of 1979 had not been received from the Certification Committee. Therefore, the Professional Education Committee was unable to review these exam results. Numerous requests and complaints have been directed to our Committee concerned with the failure to receive the 1979 Certification Examination results for their curriculum graduates. It is hoped that these results can be provided by Rod Moore, Chairperson of the Certification Committee, upon
The Committee reviewed the course outlines and behavioral objectives for this third level of instruction and recommended that this educational program be approved by the NATA for another year. It was reported that an alternative athletic training education program had been submitted by the United States Sports Academy located in Mobile, Alabama. The Committee did not review this alternative educational program due to the lack of time and place it on the agenda for its June meeting. The directors reported that the proposed guidelines for developing and implementing a NATA approved athletic training education program and revised evaluation and approval procedures for these programs were nearing completion and would be presented to the Committee members for their review prior to the Professional Education Committee's June meeting.

The 1980 Professional Preparation Conference held at the Opryland Hotel in Nashville, Tennessee on January 4, 5, and 6, 1980 was a success for the third year in a row with 102 persons in attendance not counting the members of the Professional Education Committee. The Committee received a check in the amount of $6000.00 from Johnson and Johnson to support both the Nashville and Palo Alto Conferences at the Nashville meeting. It was voted to return to Nashville for one of the 1981 Conferences. The Nashville Conference will be held on January 9, 10, and 11, 1981 at the Opryland Hotel.

It is too early for a report on the Palo Alto Conference since preregistration at the time pressing is not closed for this educational program. Plans for a second conference in 1981 are being delayed until the June Committee meeting at which time a final decision will be made.

It was reported that 607 copies of the Proceedings of the 1979 Professional Preparation Conference have been sold, and that the transcripting and typing of the Proceedings of the 1979 Professional Preparation Conference had been completed and editing of this material would start in the very near future. Inquiries for sale of the proceedings for publication of the Proceedings. If this proposal is not possible, we will seek out an agreement with a commercial publishing concern for the printing of the Proceedings. It must be noted that both the publications and the educational programs of the American Academy of Family Physicians as continuing education programs for its members. A reporter from the Physician and Sportsmedicine would present this as a NATA publication of the Proceedings.

The Committee also recommended that a complimentary copy of the Proceedings of the 1979 Professional Preparation Conference be provided the ERIC (Educational Research Information Center) in order to provide our NATA members with an NATA publication of the Proceedings.

Mr. Phil Donley proposed the development of a diagnostic test that can be administered to curriculum graduates, apprenticeship students and others in order to measure the student's knowledge of the NATA Behavioral Objectives. This test would strictly be a written examination measuring only didactic knowledge and would not be designed to rival the NATA Certification Examination. Possibly, it would be used by institutions as part of the didactic education program to professionally preparing their students in each of the specific areas of the NATA's Behavioral Objectives. Phil was given the responsibility to develop the diagnostic test and the methodology to administer as a formal presentation to the Professional Education Committee.

In order to strengthen the quality of the athletic training education programs approved by the NATA, the Professional Education Committee has undertaken two tasks. The first step was to revise the Guidelines for the Development and Implementation of NATA Approved Undergraduate Athletic Training Education Programs and submitted to the Committee for approval at our June meeting.

The second step in improving the quality of the athletic training curricula approved by the NATA is to develop the NATA's Behavioral Objectives and Skill Competencies. This task will be completed at the Professional Education Committee's June meeting.

During discussion concerning an improvement in the quality of the athletic training education programs, it was felt that the Committee should not only improve the quality of the professional preparation of the curriculum graduate but also make every effort to increase the quality of the entire NATA membership as stated in the duties and responsibilities of the Professional Education Committee in the NATA By-laws. In addition, it was felt that any steps to advance and improve the quality of the professional preparation and education of the entire NATA membership and the athletic training profession must be on the basis of long range planning in which goals and objectives are achieved during the long range planning period. The Professional Education Committee has been working on a position paper on the budgeting of the education programs. This position paper will be presented to the Committee and many of the committees have been approved by both bodies without the guidance of a master plan and the opposition of individual members both on the Board and Committee since 1978. The Education Program has been under development. The major emphasis in our NATA membership since many of our members subscribe to this McGraw-Hill publication and would only have to remit $10.00 for the registration fee. We would like to have an education program that will be approved by the NATA at the end of five or ten years and the basic goals and objectives established to achieve these goals for athletic training education programs. The major emphasis in our NATA membership since many of our members subscribe to this McGraw-Hill publication and would only have to remit $10.00 for the registration fee. We would like to have an education program that will be approved by the NATA at the end of five or ten years and the basic goals and objectives established to achieve these goals for athletic training education programs. The major emphasis in our NATA membership since many of our members subscribe to this McGraw-Hill publication and would only have to remit $10.00 for the registration fee. We would like to have an education program that will be approved by the NATA at the end of five or ten years and the basic goals and objectives established to achieve these goals for athletic training education programs. The major emphasis in our NATA membership since many of our members subscribe to this McGraw-Hill publication and would only have to remit $10.00 for the registration fee. We would like to have an education program that will be approved by the NATA at the end of five or ten years and the basic goals and objectives established to achieve these goals for athletic training education programs.
II. ATHLETIC TRAINING • Summer 1980

Alt is recommended that the Board of Directors approve the undergraduate level Athletic Training curriculum.

b. The objectives of the other type of graduate curriculum would be comprehensive in nature. This postgraduate curriculum would provide the high school faculty member or any individual possessing a baccalaureate degree the opportunity to professionally prepare for a career in the field of athletic training. This curriculum would require two years to complete.

Plans:

a. The first step will be the development of behavioral objectives and skill competencies for the athletic training administration, research, and education. The development of these specific behavioral objectives and skill competencies will guide institutions desiring to implement this type of undergraduate level athletic training curriculum.

b. The second step will be the revision of the Guidelines for the Development and Implementation of Approved Graduate Athletic Training Education Programs to accommodate for the two different types of graduate curriculums.

c. Finally, all institutions desiring to have their graduate athletic training curriculum approved by NATA, will have to meet the type of education program they are providing and will be required to meet the standards established for that type of program.

Goal # 3 — Improved membership. The professional preparation of those individuals seeking a career in athletic training but not by completing the requirements of a NATA approved undergraduate or graduate athletic training curriculum:

Purposes:

a. Improve the quality of the professional preparation of the entire NATA membership and the advancement of the Association and the entire athletic field.

b. Providing some type of didactic coursework or educational program in athletic training for all individuals seeking a career in athletic training will also enhance state athletic trainers associations and societies in their efforts to state license especially where state legislatures demand that all individuals state licensure especially where state legislatures demand that all individuals preparing for careers in athletic training but not enrolled in a NATA approved curriculum.

c. The objectives of the second type of graduate curriculum would be comprehensive in nature. This postgraduate program of study would be required to be completed by all individuals preparing for a career in athletic training.

d. The second step will be to develop educational opportunities in the form of intensive didactic coursework offered during the summer for those individuals preparing for careers in athletic training but not enrolled in a NATA approved athletic training curriculum. At first, these intensified summer courses would be offered on a voluntary basis. As soon as a sufficient number of NATA approved education programs can be developed and in each of the 50 states, these courses would be required to be completed by all individuals preparing for a career in athletic training.

e. The third step will be to provide guidelines for the development and implementation of new education programs and to make these education programs and athletic training educators widely available. The number of topics presented will be limited but given sufficient time for an in-depth presentation and allowance for ample discussion.

The professional preparation conferences have also drawn interest of sports medicine physicians. The American Academy of Family Physicians has recognized the quality of our conferences and has approved them for the credits of certified athletic trainers with continuing education credit for those members of the Academy attending one of our educational programs. Pass on the knowledge of this opportunity to your team physician. He may be interested in attending too.

Once again, the speakers will consist of a blend of nationally recognized physicians, athletic trainers, lawyers, physical therapists, educators, pharmacists, strength coaches and other sports medicine experts. The number of topics presented will be limited but given sufficient time for an in-depth presentation and allowance for ample discussion.

The agenda for each of these conferences is enclosed.

On September 10, 1980 Indiana University will host the 1980 NATA Regional Conference at the Holiday Inn. Housing and registration will be limited to 250 participants. The only way to guarantee your attendance is to preregister. The attached form is for your convenience in completing preregistration. The deadline for NATA Regional Conference is December 15, 1979. The deadline for the Palm Alto Conference is January 15, 1980.

Dont become an obsolete athletic trainer—continue your education and meet the NATA Professional Education Committee's guidelines for verification of work hours. A second conference will be held at Rickey's Hyatt House, Palo Alto, California on sessions starting either Friday noon or evening and concluding at noon on Sunday. During both conferences, sessions primarily designed for program directors of athletic training education programs and athletic training educators will be held.

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X. EMPLOYMENT OF LEGAL COUNSEL:

It was moved by District 8, recorded by District 4 to accept the proposal of Mr. Lawrence Graham, Attorney, and appoint Mr. Graham as the attorney representing the Association. (Carried 10-0)

XI. HONOR AWARDS:

The Board was informed that recommendations for these awards were still being received at the National Office. It was indicated that there was no action required on this at the moment but that when all nominations have been received, they will be put on one list and that list sent to the Directors for their mail ballot.

The announcement of the death of Porky Morgan was likewise made, with the suggestion that the Directors submit all nominations for the Twenty Five Year Award to George Sullivan.

XII. INTERNATIONAL GAMES:

Mr. Chambers indicated that no material had been received and, therefore, there was nothing to report and no action to be taken.

XIII. JOURNAL:

It was moved by District 8, seconded by District 7 to approve the proposal of Mr. Chambers to have him present subsequently some plan to implement this suggestion. (Carried 10-0)

IX. NASPE:

It was moved by District 8, seconded by District 9 to assist NASPE with the coordination of physicians from Mexico coming to the United States for utilization of sports medicine facilities through a certified athletic trainer. (Carried 10-0)

The professional preparation conferences have also drawn interest of sports medicine physicians. The American Academy of Family Physicians has recognized the quality of our conferences and has approved them for the credits of certified athletic trainers with continuing education credit for those members of the Academy attending one of our educational programs. Pass on the knowledge of this opportunity to your team physician. He may be interested in attending too.

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XIII. JOURNAL:

It was moved by District 8, seconded by District 7 to approve the proposal of Mr. Chambers to have him present subsequently some plan to implement this suggestion. (Carried 10-0)

XIV. MEMBERSHIP:

It was moved by District 4, seconded by District 7, that only certified members can sponsor an individual for advisory membership. (Carried 10-0)

It was moved by District 8, seconded by District 7 to ask the Membership Committee prepare a suitable log for the recording of practical hours under an NATA Certified Athletic Trainer where applicable. (Carried 9-0-1, with District 1 abstaining). It was moved and seconded that when all nominations have been received, they will be put on one list and that list sent to the Directors for their mail ballot.

The announcement of the death of Porky Morgan was likewise made, with the suggestion that the Directors submit all nominations for the Twenty Five Year Award to George Sullivan.

The professional preparation conferences have also drawn interest of sports medicine physicians. The American Academy of Family Physicians has recognized the quality of our conferences and has approved them for the credits of certified athletic trainers with continuing education credit for those members of the Academy attending one of our educational programs. Pass on the knowledge of this opportunity to your team physician. He may be interested in attending too.

X. EMPLOYMENT OF LEGAL COUNSEL:

It was moved by District 8, recorded by District 4 to accept the proposal of Mr. Lawrence Graham, Attorney, and appoint Mr. Graham as the attorney representing the Association. (Carried 10-0)

XI. HONOR AWARDS:

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The announcement of the death of Porky Morgan was likewise made, with the suggestion that the Directors submit all nominations for the Twenty Five Year Award to George Sullivan.

XII. INTERNATIONAL GAMES:

Mr. Chambers indicated that no material had been received and, therefore, there was nothing to report and no action to be taken.
Concerning the matter of the Alan Haines Case the Board took no action, it being in­
dicated that Mr. Melin had previously handled this matter.

XV. MEMORIAL COMMITTEE:
It was moved by District 7 that the Memorial Commit­
tee of each district notify the National Office of a death
and the date of the death, in order that the National Of­
cice may compile a list of deceased members.

XVI. 1980 CONVENTION:
Attention was called to the various reports concerning the forthcoming convention
program which indicated that all of this material was considered to be of an
informative nature to the directors.

Attention was likewise called to the request of a trainer in District 6 concerning the
publicity given to clinics and conferences given at previous National Conventions to be
placed on sale at the forthcoming convention. No specific action was taken on this
request with the consensus being that this matter be submitted to the appropriate in­
dividuals for consideration.

It was moved by District 8, seconded by District 7, that the Executive Director make
arrangement for the sale of T-shirts at the National Meeting; with all profits going to the
Grants and Scholarships Committee. (Carried 9-1; District 1 opposed)

It was moved by District 8, seconded by District 7, that speakers be provided with
one night’s lodging and meals, round-trip air coach fair or 18 cents per mile and a
speaker’s fee of one hundred dollars per hour—this to be for all speakers, both MD’s
and NATA members. It was then moved by District 8, seconded by District 7 that this
motion be tabled due to the fact that there is presently a survey being made concerning
what other organizations are doing on this point. The motion to table was then voted
upon with Districts 1, 3, 4, 5, 6 and 9 in favor of tabling and Districts 2, 7, 10 and
13 in opposition, the motion to table being declared to be carried.

It was moved by District 8, seconded by District 7, that the NATA offer extension
units through California State Hayward for the clinical symposium for the Philadelphia
meeting. (Carried 10-0)

Concerning the matter of Nashville hotel prices, Mr. Davis called attention to the fact
that the Nashville hotels would not present their prices until approximately nine mon­
thas before the contemplated meeting date; he further indicated that prices
are constantly on the increase and that probably by that time they might reach $100
for a single room per night. The matter, by common consent, was accepted as in­
formation with no definitive action being taken by the Board.

XVII. PLACEMENT COMMITTEE:
It was moved by District 9, seconded by District 5, to accept the resignation of Rod
Peindexter. (Carried 10-0)

It was moved by District 3, seconded by District 2 to appoint Craig Sink of North
Carolina State University, as Chairman of the Placement Committee. (Carried 9-1, with
District 1 abstaining)

It was moved by District 10, seconded by District 8 that Phil Luckey of Idaho State be
approved as a committee member. (Carried 10-0)

XVIII. PUBLIC RELATIONS:
It was moved by District 8, seconded by District 2 to accept the resignation of Dick
Hoover as Chairman of the Public Relations Committee. (Carried 10-0)

It was moved by District 8, seconded by District 7, that the Executive Director ex­
plorè the possibility of obtaining a public relations firm to promote athletic training as
a profession and report back at the June meeting. (Carried 10-0)

Concerning the issue of an NATA postage stamp, Mr. Chambers called attention to a
letter addressed to Mr. Dick Hoover from Richard Carey indicating a strong possibility
that an NATA stamp would come out in either 1981 or 1982, with Mr. Carey intending
to keep in touch with the Chairman of the Public Relations Committee concerning this
issue.

XIX. RESEARCH AND INJURY:
It was moved by District 8, seconded by District 10, to accept the report for in­
fornational purposes. (Carried 10-0)

Concerning the NATA membership survey, it was reported by Mr. Chambers that
things were going along in regular order, that presently arrangements were being made
to go with a confidential report and that no further action at this time was in­
dicated.

Concerning a call for abstracts, no action was taken at this time.

XX. AMERICAN ACADEMY OF FAMILY PHYSICIANS:
No report or correspondence having been received, it was indicated no action was
necessary.

XXI. AMERICAN ACADEMY OF PEDIATRICS:
Mr. Malarencz reported a communication received from this group concerning their
support for the new liaison activity with the AHPERD. It was moved by District 6, seconded
by District 7, to accept the report. (Carried 10-0)

December 1979
Mid-year report
Liaison - American Academy of Pediatrics

The semi-annual meeting of the Committee on the Pediatric Aspects of Physical Fit­
tess, Recreation, and Sports of the American Academy of Pediatrics was held on
December 1 and 2 at the Fawcett Center for Tomorrow on the campus of Ohio State University.

Committee
Thomas G. Flynn, MD, (Chairman) New Canaan, Conn.
Thomas Shaffer, MD, Columbus, Ohio
Melvin Thornton, MD, San Antonio, Texas
Clements Van Bous, MD, Portland, Or.
John Kinnel, MD, Cleveland, Ohio
Robert McLeod, Jr., MD, Somerset, Ky.
Nathan Smith, MD, Seattle, Wash.
William Steff, MD, Augusta, Ga.

Consultants
Kay E. Wilkins, MD, San Antonio, Texas - Section on orthopedics
Henry Lee, Committee, Toronto, Canada - Section on Chesh Diseases

Liaison & guests
Lucille Burkett, AHPERD

Richard Malarencz, NATA
Fred Baker, MD, Pediatrician, Ann Arbor, Mich.
Oded Bar-Or, PhD, ACSM
Verne Seefeldt, PhD, Michigan State Univ.
Louis Richardson, MD, Chief, Sports Medicine, Barnes.
O.S.U.

The minutes of the previous meeting were reviewed and accepted. You will also note
the new liaison activity with the AHPERD and the National Federation. In addition, in­
formal liaison with the ASTRO, Mr. Bob Delacour presented the ACSM and the
National Federation Mr. Bruce Barlow was unable to attend.

The Committee evaluated, reworded, approved or rejected various statements dealing
with trampolines, swimming for infants, cheering, equestrian safety, vigorous
physical activity for children, playgrounds, minibikes, camping, weight training,
and competitive athletics for children of elementary school age.

Dr. Wilkins has been assigned the task of developing an educational package that can be
used in the school curriculum for a seminar for coaches and parents. This links the
ongoing dialogue regarding the need for the certification of coaches in basic first-aid,
junior, recognition, and C.P.R. Committee members cited the Canadian program guide for
use by coaches and the National Federation of Michigan and the Michigan pro­
community of coaches.

Dr. Smith has been charged with developing and editing a Handbook on Youth in Sport for
the AHPERD and the AATA. A rapporteur was selected and the author for each chapter identified. The NATA Liaison member was asked to prepare the Appendix sections on taping and rehabilitation after injury.

Dr. Bar-Or reported on the history and structure of the ASCM and noted the rapid ex­
ansion in membership over the last five years. He also commented on the potential
for the AHPERD and the ASCM to expand into international representation. A Committee member noted the strong influence of the researcher and exercise physiologist, Dr. Bar-Or defended this position in that the organization membership was heavy in this direction, that every effort was
made to rotate the Presidency through the various disciplines, and that there has been
an effort to include more articles of interest to the clinician. However, he supported the
need for a journal of this type.

Dr. Baker reported that the Canadian Pediatric Society has produced similar state­
ments on the use of skateboards and trampolines.

Dr. Levinson reported on the work of the American Lung Association regarding the
nausea and vomiting associated with exercise. He stated that the locker room should be open to
kids on drugs. (Therapeutic) That too many children with pulmonary problems, and on
a drug program, are excluded from sport.

Miss Burkett reported on the recent publication by the AHPERD, A Manual on Youth in Sport and that it is available through that organization.

The NATA liaison reported that 1) The Red Cross proposal to establish a course on
first aid for athletic injuries was defeated and that there has been further com­
munication between the American Red Cross and the interested organizations.
2) There is another organization (AATA) that portends to represent athletic trainers to
and to be confused if in fact one would receive any communication regarding this group. The relationship between the AATA and NATA was pointed out
and that the APTA was the major organization representing the physical therapist.
3) The history of the NATA – APTA task force meeting and the resultant action of the
AHPERD was brought to the attention of the Committee. A letter of support for the con­
cept of an Athletic trainer licensure was again solicited for either the Committee or the AHP.
The discussion, this year, was much more positive and was noted by the Chair­
man. He requested that copies of these documents and the subsequent discussions of the
Committee exist the Executive Board of the AHP.

There was a short presentation on heat stress and thermoregulation in children by Dr.
Bar-Or. Some important points were that 1) children have a larger surface area to
weight ratio than do adults, 2) children adapt more slowly physiologically but more
quickly subjectively and therefore lose some defense mechanisms, 3) even with forced
replacement programs there is still water weight loss, 4) rectal temperatures of
children are greater than lean adults but less than obese adults, all with the same body
weight loss, 5) because of a larger S.A./w ratio children cool more quickly in cool
water. Dr. Flynn requested that this material be synthesized into a statement and presented
to the Board.

The meeting was adjourned.

XXII. AMERICAN ALLIANCE FOR HEALTH, PHYSICAL EDUCATION, RECREATION AND DANCE
AMERICAN ALLIANCE FOR HEALTH, PHYSICAL EDUCATION, RECREATION AND DANCE
NATA LIAISON REPORT
Sayers "Bud" Miller
NATA Liaison Representative

Since my last report, there has been very little activity concerned with the field of
athletic training occurring within the AHPERD. One exception has been the develop­
ment and implementation of the athletic training column in the AHPERD’s Journal with
Miss Burkett as the associate editor. We have been able to share this column’s editor.
He has been doing an excellent job but has had to write a great number of the articles. I
would hope that the Board of Directors would encourage the NATA membership to
make contributions to this column.

The next big event in this organization is the AHPERD’s National Convention to be
held in Detroit, Michigan, April 11-15, 1980. Both the National Association of Girls
and Women’s Sports’ Athletic Training Committee and the National Association of Sport
and Physical Education’s Athletic Training Council will be presenting educational programs
at this convention. In addition, a NASPE sponsored one-day pre-convention program
concerned with the field of athletic training will be held on April 10, 1980 in Detroit,
Michigan. Several certified athletic trainers will participate in these programs.

At the present time I do not have any requests or recommendations for action to be
taken by the Board of Directors, however, if you should have any problems or
questions about athletic training in your area, you may contact me at my office.

XXIII. AMERICAN COLLEGE HEALTH ASSOCIATION:
It was moved by District 7, seconded by District 8 that liaison with this group be con­
tinued and that there also be representation provided concerning their meeting (in San
Diego, CA in April). Carried (10-0)

The report is as follows:

ATHLETIC TRAINING • Summer 1980
ATHLETIC TRAINING • Summer 1980

Regarding the request for exchange of documents with the ACSM, it was indicated by Mr. Davis that this was already done. No further action was taken.

It was moved by District 10, seconded by District 8, to approve funds for Ken Knight to attend the annual meeting of the American College of Sports Medicine to be held in Las Vegas. Carried 10-0.

December 19, 1979

Mr. Otis Davis
Executive Director,
National Athletic Trainers Association
Veterans Stadium
Philadelphia, PA. 19148

Dear All:

The American College of Sports Medicine is as follows:

1. My June 1979 report to the NATA Board of Directors was accepted as information and as such two action items were not acted upon. I need some type of a response to take back to the ACSM. Specifically:

a. The ACSM would like to have an exchange of journals, newsletters, and official correspondence between their Presidents and Executive Directors of the NATA and ACSM. Does the NATA want this official exchange?

b. The ACSM is going to establish a National Sports Medicine Center in Kansas City to serve as their International Headquarters (see attached letter). They indicated last summer that they would like to talk to the NATA about being a part of this center. Does the NATA want to talk to them about it? If so, to whom should I tell them about this?

2. The 1980 Annual Meeting of the ACSM is May 26-30 in Las Vegas, I would like to request funds to attend this meeting as an official representative of the NATA.

3. I think it is essential that the NATA continue liaison activities with the ACSM. They are an international body that includes members of about every discipline involved with sports medicine. Our presence at their meeting is felt by a number of people last year they invited me to their board of directors meeting and asked for a report from the NATA. Now that the Moratorium on licensure has been lifted I think we should actively seek their support of licensure of Athletic Trainers.

I am organizing a symposium to be co-sponsored by the NATA and the ACSM at the 1981 ACSM Annual Convention. The proceedings of this symposium would be published in either Medicine and Science in Sport or Athletic Training. Will the NATA support either of the following outlines? Are there suggestions for speakers for any of the following topics?

a. Care of Acute Muscle-Skeletal Injuries with Cold
   1. Physiological effects of cold
   2. Ice application pre and post surgical
   3. Cryokinesis
   4. Treatment of muscle spasms with cold

b. Total Rehabilitation of Acute Muscle-Skeletal Injuries
   1. Developing pain free range of motion
   2. Strength development following immobilization and/or injury
   3. When and how to develop muscular endurance following injury
   4. Speed of contraction
   5. Post injury re-education of skill patterns
   6. Cardiovascular maintenance and reeducation in the injured athlete

Please give me some specific direction concerning each of the above points.

Sincerely,
Kenneth L. Knight, PhD, ATC
Athletic Trainer, Associate Professor
KLK/KMD
Enclosure

For further information contact Carol L. Christison (608-262-3632)

November 1979

RELEASE AT WILL

AMERICAN COLLEGE OF SPORTS MEDICINE OPINION STATEMENT

The Participation of the Female Athlete in Long-Distance Running

In the Olympic Games and other international contests, female athletes run distances ranging from 100 meters to 3,000 meters, whereas male athletes run distances ranging from 100 meters through 10,000 meters as well as the marathon (42.2 km). The limitation on distance for women's running events has been defended at times on the grounds that long-distance running may be harmful to the health of girls and women.

Opinion Statement

It is the opinion of the American College of Sports Medicine that females should be permitted to compete in long-distance running. There exists no conclusive scientific or medical evidence that long-distance running is contraindicated for the healthy, trained female athlete. The American College of Sports Medicine recommends that females be allowed to compete at the national and international level in the same distances in which their male counterparts compete.

Supportive Information

Studies (10, 32, 41) have shown that females respond in much the same manner as males to systematic exercise training. Cardiorespiratory function is improved as indicated by significant increases in maximal oxygen uptake (4, 6, 13, 16, 30). At maximal exercise, stroke volume and cardiac output are increased after training (10). At standardized submaximal exercise intensities after training, cardiac output remains unchanged, heart rate decreases after training (30). As is the case for males, relative body fat content is reduced consequent to systematic endurance training (3, 35, 51).

Long-distance running imposes a significant thermal stress on the participant. Some differences do exist between males and females with regard to thermoregulation during prolonged exercise. However, the differences in thermal stress response are more qualitative than quantitative in nature (46, 38, 47). For example, women experience lower evaporative core and skin temperatures than do men exposed to the same thermal stress (28, 40, 50) and usually have higher skin temperatures and deep body temperatures upon onset of sweating (18, 19, 45). This may actually be an advantage in reducing body water loss so long as thermal equilibrium can be maintained. In view of current findings (10, 11, 15, 40) it appears that the earlier studies which indicated that women were less tolerant to exercise in the heat than men (38, 50) were misleading because they failed to consider the relatively low level of physical fitness and heat acclimatization.

Apparent, cardiolongitudinal fitness as measured by maximum oxygen uptake is a most important functional capacity as regards a person's ability to respond adequately to heat stress (9, 11, 15, 50). In fact, there has been considerable interest in the seeming cross-adaptation of a life style characterized by physical activity involving regular and prolonged periods of exercise hypothermia and response to high en
viromental temperatures (1, 37, 39). Female athletes who are long-distance runners have been reported to be more tolerant of heat stress than non-athletic women matched for age and body surface area (15). Thus, it appears that trained female long-distance runners have the necessary physiological adaptation to the heat stress of prolonged exercise as well as the moderate-to-high environmental temperatures and relative humidities that often accompany these events.

The participation of males and females in road races of various distances has increased tremendously during the last decade. This type of competition attracts the entire spectrum of runners with respect to ability — from the elite to the novice. A common feature of virtually all of these races is that a small number of participants develop medical problems (primarily heat injuries) which frequently require hospitalization. One of the first recommendations of the medical problems associated with mass participation in this form of athletic competition was by Sutton and co-workers (42). Twenty-nine of 2,005 entrants in the 1971 Sydney City-to-Surf race collapsed; seven required hospitalization. All of the 154 entrants in the 1978 Canadian road race, in which 1,250 people participated, 15 entrants developed heat injuries — three females and 12 males, representing 1.2% and 1.9% of the total number of female and male entrants, respectively.

There are no data available, however, to support this suggestion. Whether or not the high intensity training style and the low relative body fat content of female long-distance runners results in a higher incidence of menstrual disturbances in running is unknown at this time. Eriksson and co-workers (26) have suggested that the anatomical differences between men's and women's pelvic structures may predispose females to a higher incidence of injuries for women who run. It is believed, however, that the incidence of injury due to running is related more to the training surfaces encountered, biomechanics of the back, leg and foot, and to foot apparel (28).

Of particular concern to female athletes and to the American College of Sports Medicine is evidence which indicates that approximately one-third of the competitive female long-distance runners between the ages of 12 and 45 experience amenorrhea or oligomenorrhea for at least brief periods (7, 8). This phenomenon appears more frequently in athletes who have undergone strenuous exercise training, who have not experienced pregnancy, or who have taken contraceptive hormones. This same phenomenon also occurs in some gymnasts, swimmers, and professional ballerinas as well as sedentary individuals who have undergone strenuous exercise training. Pollock et al. (42) have shown that the incidence of these injuries for males engaged in a program of jogging was as high as 50% and was related to the frequency, duration, and intensity of the jogging programs. A study by Trivers et al. (18) recently reported the incidence of amenorrhea among sedentary females exposed to a 12-week jogging program. The injury rate for the females appeared to be comparable to that found for males in other studies although, as the investigators indicated, a definite interpretation of presently available information may be premature because of the limited orthopedic injury data available for women. It has been suggested that the anatomical differences between men and women's pelvic width and joint laxity may lead to a higher incidence of injuries for women who run. There are no data available, however, to support this suggestion. Whether or not the high intensity training style and the low relative body fat content of female long-distance runners results in a difference in injury rate between the sexes is not known (7,6).

The commission feels that this additional rule is needed to afford the player the protection to which he is entitled. Statistics indicate that well over 100,000 mouth injuries per year are being avoided by proper use of mouth protectors.

A PROCEDURE of interest that has undergone strenuous exercise training are unknown at this time. Eriksson and co-workers have reported, however, that a group of 28 young girls who underwent strenuous swim training for 2.5 years were normal in all respects (e.g., child-bearing) 10 years after discontinuing training.

In summary, a review of the literature demonstrates that males and females adapt to exercise training in a similar manner. Female distance runners have the capacity to deal with the thermal stress of prolonged running, and their relatively low partial pressure of oxygen at altitude seem to be well tolerated by females. The limited data available suggest that female distance runners are characterized by low body weight (7, 21, 25). Running long distances may lead to decreased body weight and joint laxity may lead to a higher incidence of injuries for women who run. It is believed, however, that the incidence of injury due to running is related more to the training surfaces encountered, biomechanics of the back, leg and foot, and to foot apparel (28).

SUPPORTING REFERENCES AVAILABLE ON REQUEST FROM THE AMERICAN COLLEGE OF SPORTS MEDICINE, 1440 Monroe Street, Madison, Wisconsin 53706.

AMERICAN CORRECTIVE THERAPY ASSOCIATION:

It was moved by District 9, seconded by District 10 to accept the report as in form contained in the yearbook. The motion was unanimously seconded by District 10. It was also indicated that Mr. Chambers wrote to Dr. Cahill of this organization concerning NATA licensure activities and how this organization can support the NATA in this and other endeavors.

XXVI. AMERICAN PHYSICAL THERAPY ASSOCIATION:

Attention was called to several pieces of correspondence indicating the progress made by the American Hockey Association in the standardization of their profession and also the need for the American Hockey Association to release with trauma or injury to the teeth or mouth.

The commission feels that this additional rule is needed to afford the player protection to which he is entitled. Statistics indicate that well over 100,000 mouth injuries per year are being avoided by proper use of mouth protectors.

Membership Reports

NATA - Pinky Newell reported there are 47 undergraduate curriculum and 7 postgraduate curriculum in progress now in athletic training. (See attachment #2). The association has addressed representative of 26 athletic organizations. Also, it has 16 major committees working. Professional education has now been divided into 6 subcommittees. They are also offering $10,000.00 scholarships. They expect to expand this area of service in scholarship. The commission is asking for $1.00 per month from the association's membership which is helpful in building their scholarship fund.

Dr. Don Cooper inquired about the opportunities for employment in athletic training. Dr. Pinky thinks that jobs are available and enhanced by certification.

NJCAA - One strong point is that all Regional Directors are sent copies of the Joint Commission and asked to present the content to its membership. The NJCAA still leaves many Directors and Trainers for its teams. However, EMT could be the answer to junior college protection in injuries. This recommendation was presented to the legislative body of the NJCAA last March.

The NJCAA membership needs to understand the meaning of certification and recertification of NOCSAE football helmets. The manufacturers can certify helmets while the reconditioner can only re-certify helmets. Also, there is no time limit on re-certification but at the direction of the athletic director or coach.

The next speaker was Dr. Milson, Montomo, talking about the artificial turf and shoe/turf interface. "Attachment #3 gives the complete report of Mr. Milson's talk," a new synthetic field costs from $200 to $900,000.00. Most fields are used about 20 per cent for football while other activities are used the remaining length of time.

ADA - Dr. Bill Heintz feels one of the hardest things to do is not to mistreat the equipment used in dental protection. Younger players sometimes alter their equipment to make a better fit or adjustment. There are three types of mouth protectors: (1) Stock (2) Form and (3) Custom Made. Dr. Heintz is concerned about the strap on the helmet and its ability to prevent trauma or injury to the teeth or mouth.

Dr. Heintz believes surfers should wear mouth pieces, possibly used on a strap similar to football. Also, it appears the American Hockey Association is gearing its standards to meet the Canadian standards.
Fred Miller gave the NCAA report. He read a prepared statement on the impaired student-athlete. (See attachment #1). Fred read nine rules that have taken place in football during the past year. (See attachment #5). The NCAA now had a prepared form to follow for a research grant. Also, they are looking at the possibility of forming an injury data collection system. (Health form - Attachment #6). The speaker at this time was Jack Redgren of Vanderbilt University talking about "NATA's Continuing Education." This was put into force January 1, 1979.

Executive Director, NATA
Philadelphia Eagles
Veterans Stadium
Philadelphia, PA 19148

Dear Mr. Davis:

As Chairperson of the NAGWS Athletic Training Council, I am the NATA liaison to the NAGWS. My term of office is from June 1, 1979 to June 1, 1980. I will then be succeeded by Chair-Elect Dr. Earlene Durrant of Brigham Young University. During my term of office I will have attended the following meetings:

1) NAGWS Fall Board of Directors Meeting, September 21-24; Washington D.C.
2) AAHPERD Convention, April 10-15; Detroit, Michigan.

The NAGWS ATC is presently engaged in the following projects and activities:

1. It must be safe for all playing the game.
2. It must be administrable by officials.
3. It must maintain the balance of offense and defense.
4. It must be interesting for the spectators.

The meeting was adjourned at 11:30.

Sincerely,

Kathleen Heek, ATC
Chairperson, NAGWS Athletic Training Council

ATHLETIC TRAINING • Summer 1980

Sincerely,

Kathleen Heek, ATC
Chairperson, NAGWS Athletic Training Council

XXX. NATIONAL ASSOCIATION OF COLLEGE DIRECTORS OF ATHLETICS:
There being no report submitted, the Board took no action.

XXX. NATIONAL ASSOCIATION OF INTERCOLLEGIATE ATHLETICS:
No report — no action.

XXXI. NATIONAL COLLEGIATE ATHLETIC ASSOCIATION FOOTBALL RULES COMMITTEE:
Motion by District 9, seconded by District 3 to approve a representative to this group. (Carried 10-0)

FROM: Warren Morris - NCAA Football Rules Committee
The annual meeting of the NCAA Football Rules Committee will be held in Biloxi, Mississippi, January 14 - 16, 1980. The Injuries and Equipment Committee which Dr. James Arnold, representing the AMA medical Aspects of Sports, John Adams, representing NCAA Football Rules Committee, one other assigned NCAA Football Rules Committee Member and Warren Morris, ATC representing NATA will meet with manufacturers of football equipment and exchange ideas on equipment and injuries during the 1979 season. The chairman will then give a report to the NCAA Football Rules Committee with the manufacturers present. The Manufacturers Representatives are then excused after the report and discussion. The Rules Committee hears all reports and then they go through the Rule Book, word for word, and add or subtract where it is necessary. The Chairman will assign committees to work on any new rule changes with the following principles that govern all rule changes:

1. It must be safe for all playing the game.
2. It must be administrable by officials.
3. It must maintain the balance of offense and defense.
4. It must be interesting for the spectators.

It will be gathering data to make my report to the NCAA Football Rules Committee from NAIBS questionnaires that are going to each reporting school for their injuries, etc. The doctor and trainer are the conscience of the committee for safety, and I believe that NATA should continue to have a representative on the NCAA Football Rules Committee.

My report will be submitted after we meet in Biloxi, January 15, 1980.

Respectfully,

Warren Morris
Head Trainer

WM: no

XXXII. NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATION:
All correspondence accepted as information and with no action being taken.

XXXIII. NATIONAL HEAD AND NECK INJURY REGISTRY:
The article concerning "Waxing War Against Cupping Football Injuries" by Norman Brown was noted as information.

Motion by District 8, seconded by District 7 to appoint Fred Berggren and Joe Voge as liaison to this group. (Carried 10-0)

XXXIV. NATIONAL OPERATING COMMITTEE ON STANDARDS FOR ATHLETIC EQUIPMENT:

1. Moved by District 1, seconded by District 10 that the NATA continues its liaison with NOSAE and that there be an athletic trainer on their Board of Directors and present at all meetings. (Carried 10-0)

2. Moved by District 1, seconded by District 2 to increase the NATA contribution to NOSAE in the figure of five hundred dollars. A vote indicated Districts 1, 2, 4, 8 and 10 as in favor; Districts 3, 5 and 9 in opposition and Districts 6 and 7 abstaining. Motion failed.

XXXV. UNITED STATES OLYMPIC COMMITTEE:
Noted as information — no action.

Considering the matter of selection of Olympic and Pan American Game Trainers, attention was called to Policy 2 of the State of Policies, with the Board desiring to take no action at this time.

XXXVI. SCHERING SYMPOSIUM:
It was indicated by Mr. Davis that this year's subject would be on the foot, with the Board then proceeding to the next item for consideration.

XXXVII. SPORTS SAFETY AND HEALTH CARE SOCIETY:

Sincerely,

Siers, Director, NAGWS Athletic Training Council

December 14, 1979

Sayers "Bud" Miller
NATA Liaison Representative

I have had no communications with the administrative officials of the Sports Safety and Health Care Society since my last report May of this year. I have been unable to contact any of the Society officers by telephone and have not received any response to my letters. If the Pulse of Sports is still being published, I have not received a copy. In addition, I have not received a 1980 does statement. These are discouraging signs but I do not have a definite official statement that the Society is defunct.

Therefore, at the present time this liaison representative to the Sports Safety and Health Care Society does not have any requests or recommendations for official action to be taken by the Board of Directors.

XXXVIII. AMERICAN COUNCIL ON EDUCATION.COMMISSION ON COLLEGIATE ATHLETICS:
Tl Board of Directors
ATHLETIC TRAINING • Summer 1980

No report — no action.

No report — no action.

No report — no action.

No report — no action.

No report — no action.

JANUARY, 1980

STATE LICENSURE: CURRENT STATUS REPORT

ALABAMA: have copy of a Bill written in 1978.

CALIFORNIA: have copy of Bill written in 1978; legislature apparently is currently in session.

FLORIDA: file contains correspondence from two individuals apparently appointed by the Florida State Athletic Trainers to initiate action.

GEORGIA: have copy of Bill; legislation enacted, January, 1977.

ILLINOIS: have copy of Bill written in 1976; current status in limbo; leadership struggle appears resolved with Bill Kauth, Skip Pickerick, and Dick Hoover apparently now re-organizing. (Info packet sent to Hoover)

INDIANA: have copy of 1978 Bill which died in committee. Newell & Miller of Purdue, Young of Indiana, and Bebke are the committee of athletic trainers. Speaker of the House may yet file Fall 1980 for re-introduction.

IOWA: have copy of Bill written in 1978. Ed Crowly, Iowa, advises that a feasibility study will be requested of the legislature in 1980 before the Bill is introduced. (Info packet sent to Crowley)

KANSAS: have copy of a Bill to be introduced Spring, 1980. Contact is Jim Rudd, Kansas State. (Info packet sent to Rudd)

KENTUCKY: have copy of Bill written in 1978; legislation enacted 7-7-79.

LOUISIANA: have copy of old Bill drafted in 1976. Current contact is: Roy Don Wilson. (Info packet sent to Wilson)

MASSACHUSETTS: have copy of a Bill written in 1978.

MICHIGAN: have copy of a Bill apparently awaiting action.

MINNESOTA: info packet sent to Gordy Graham. A questionnaire is apparently being circulated to determine a need for the "credentialing of Athletic Trainers in the State of Minnesota."

MISSISSIPPI: info packet sent to Doug May.

MISSOURI: have a copy of Bill written in 1979. Info Packets sent to Bill Hopfinger and Bud Tice. Apparently difficulty dealing with P.T. injustices and state practice.

NEW JERSEY: have copy of a Bill written June, 1979. Info packet sent to Joe Camillone.

NEW MEXICO: have copy of a Bill, no date. Info packet sent to Barry Svalberg.

NEW YORK: have copy of Bill written in March, 1978. Have a large notebook of articles sent by Mike Cappello which apparently served as the source for the appendices listed in the document "18 Questions Likely to Be Asked by Legislators." Have materials from Dr. R.D. Salan regarding attempts of athletic trainers to introduce legislation. Have requested comments from Bill Chambers, Otho Davis, and Larry Graham. Currently preparing a response to Dr. Salan.

NORTH CAROLINA: have a copy of Bill written in 1979. Have communications from Rod Compton, Herman Bunch, Larry Graham, and A J Proctor.


OREGON: have a copy of Bill written in 1979. Not aware of current action.

OHIO: have correspondence dated back to 1976. There is apparently an attempt to affiliate with the State HPER Association and push for certification; but repeated efforts to secure copies of proposals have not been answered.


TENNESSEE: have copy of Bill written in 1978.

TEXAS: have copy of Bill enacted in 1972 and copy of CEU amendment introduced in 1978.

VIRGINIA: have copy of Bill written in January, 1979. No contact but the Bill was sent in a University of Richmond envelope.

WEST VIRGINIA: conversations with John Spiker. Info packet sent to Spiker. Unique Bill apparently to be introduced in January 1980. Bill to not only license athletic trainers, but require them in all schools receiving state funds (high school and college).

WISCONSIN: have copy of Bill written in 1979. Correspondence indicating Wisconsin Physical Therapy Association will oppose the Bill.

AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS: The Board accepted as information the report of Mr. Chambers concerning the current status with Dr. Ellison.

NATIONAL STRENGTH COACHES ASSOCIATION: No report — no action.

JAPAN ATHLETIC TRAINERS: It was indicated that there would be Japanese representation at the Philadelphia meeting and, for membership purposes, they would be treated as International Affiliate Members.

NAIRS: July 9, 1979

Mr. Bill Chambers

President

National Athletic Trainers Association

Dept. of Health, Physical Education & Recreation

Fullerton Junior College

301 E. Chapman Street

Fullerton, California 92634

Dear Bill:

This letter is an expression of our thanks for your award of $800 to the National Athletic Injury/Ellness Reporting System (NAIRS).

This award is to be utilized in support of several workshops in the coming year to describe NAIRS to athletic trainers in different parts of the country. There are the conferences which are crucial to the expansion of our data collection into new colleges and high schools.

We very much appreciate your support of our efforts.

Sincerely yours,

John W. Powell

NAIRS Coordinator

Edward E. Hunt Jr., Ph.D.

NAIRS Director

JWP:jo

U.S. WOMEN'S LACROSSE ASSOCIATION: No report — no action.

TEXAS SURVEY: It was indicated that the material furnished was for information only and no action was required.
XLVII. ATHLETIC TRAINER OF THE YEAR:
Attention was called to the material furnished the Directors and with further indication of no action being required.

NATA Honors Top Trainers
GREENVILLE, N.C. — (December 21, 1979) — The National Athletic Trainers Association (NATA) today, announced winners of its Fourth Annual Athletic Trainer of the Year Awards. Presented to top trainers in professional, college, junior college and high school athletics, the awards recognize trainers who have made outstanding contributions to their profession and the care of athletes.

Trainers of the Year for 1979 are:

Professional Division
Jerry Rhea
Atlanta Falcons
University of Virginia

Junior College Division
Bill Chambers
Fullerton (CA) Junior College
College Division
Joe Gieck
High School Division
Glenn Snow
Floyd Central High School
New Albany, Indiana

Winners of the fourth annual awards were selected from among certified athletic training professionals by a vote of the association's international membership. The awards are sponsored by NATA and The Drackett Company, creators of NUTRAMENT, a body building energy food used widely by athletes. The winners of the high school, college, and junior college divisions awards will have $1,000 donated to their institution for use in athletic programs.

XLVIII. CRAMER COURSES:
Mr. Chambers called attention to his request for copies of Cramer Course brochures, that these had not been received as yet but would be sent to the Directors upon their arrival.

XLIX. INSURANCE PROGRAMS:
Following perusal of the material furnished concerning insurance programs for the NATA membership, it was moved by District 5, seconded by District 6 to allow Mr. John Pullen, a representative of the Insurance Company of North America to proceed with a survey of the insurance programs of athletic trainers written by Mr. Pullen.

L. DISCUSSION ON PRESCRIPTION MEDICATIONS:
Attention was called to the updated material furnished the Directors and with further indication of no action being required.

LII. RELEASE OF MEDICAL INFORMATION:
Attention was called to the request of District 2 concerning a change in the policy to allow a non-Board member to be nominated for the office of President and the reasons for this request; indicating that it would provide more opportunity for other qualified individuals to run for this office. Mr. Malacrea then moved that the petition regarding this matter be given further consideration by the Board, which motion died for lack of a second.

LIII. NATIONAL GYMNASTICS CATASTROPHIC INJURY REPORT:
Report accepted as information with no action being taken.

LIV. ALAN ALPER REQUEST:
Mr. Alper requested that candidates for office at any level be required to make a statement regarding their motivation, goals and objectives for seeking elected office. Mr. Malacrea then moved that candidates for office at any level be required to make a statement regarding their motivation, goals and objectives for seeking elected office, which motion likewise died for lack of a second.

LIX. FURNISHING OF FINANCIAL REPORT IN REGISTRATION PACKET:
Mr. Malacrea also presented a request from District 2 to the effect that a financial report be incorporated into the registration packet at the convention meeting. A discussion was held as to just what form of financial report was desired. Mr. Malacrea in indicating his approval that this take the form of a one-page balance sheet that Mr. McIntyre or Mr. Davis would develop.

It was moved by District 2, seconded by District 8, that a financial report be incorporated into the registration packet at convention meetings, this to be a one-page balance sheet that Mr. McIntyre or Mr. Davis would develop for disbursements and receipts covering the fiscal year up to the annual meeting. The motion was then voted upon with seven being in favor, two districts being against (Districts 3 and 9) and also District 7 abstaining.

LX. ARTICLE FROM THE PHYSICIAN AND SPORTS MEDICINE:
Attention was called to the article as information with no action being taken.

LXI. FEDERAL EMPLOYER IDENTIFICATION NUMBERS FOR NATA DISTRICTS:
The report was accepted for information and with no action being taken by the Board.

July 5, 1979
Mr. Otis Davis
NATA Executive Director
Veterans Stadium
Philadelphia, Pennsylvania 19148
RE: Federal Employer Identification Numbers for NATA Districts

Mary recently advised me that you are interested in the specific code section regarding the necessity for districts having a federal employer identification number. Internal Revenue Service code section 501(c) states that organizations except under this section of the code which have gross receipts of less than $10,000 per year are not required to file the annual information return number 990 for exempt organizations.

In the case of the districts have gross receipts of more than $10,000, they should file this annual return and will obviously have to have a federal employer identification number in order to do this. If the respective districts gross receipts are under $10,000, they will have no requirement to file. In that case the only reason they would need a federal number would be if they were paying salaries or other related type payment which required periodic payroll tax returns.

This identification number is for identification purposes only and does not normally give rise to any types of liability. Please advise if you have any additional questions concerning this matter.

I thoroughly enjoyed the convention and meeting with your board of directors. I am in the process of preparing a proposal as a follow-up to that meeting which reduces to writing some of the ideas I had and also a follow-up and proposed format that was requested by your board.

Thank you for allowing my firm to provide management and accounting services to your organization.

With kind regards I remain,
Very truly yours,
J. Brooks McIntyre

LXII. GOVERNOR'S CONFERENCE ON SPORTS MEDICINE:
Attention was called to the contemplated Conference on Sports Medicine in relation to Illinois High Schools to be held on March 21, 1979, this matter being accepted as information by the Board.

LXIII. SPORTS ILLUSTRATED ARTICLE:
Mr. Chambers called attention to his letter concerning this matter entitled "Dispensing with Liminum" as it appears in the December 17th issue, indicating that up to the present time he had received no response to his letter and that this matter was merely informational and no action was requested.

LXIV. STATISTICAL BULLETIN ARTICLE:
It was indicated that this article was merely submitted as information and with no further action necessary.

LXV. NATA REPORT:
Mr. Davis called attention to the comment by Brooks McIntyre regarding a full scale audit and his recommendation to continue the auditing procedures in their present form.

LXVI. MEDICOLEGAL NEWS ARTICLE:
President Chambers called attention to the letter he sent in response to this issue requesting that they in turn send him copies of any editorial responses.

LXVII. ATPC EMPLOYMENT AT SPORTS MEDICINE CLINICS: OPPOSED BY APta
Presented for information only.

LXVIII. LARRY GRAHAM'S LETTER TO RICK RAY OF RAYCOM, INC.: No action necessary.

LXIX. ADJOURNMENT:
There being no further business to consider, the meeting was adjourned at 4:45 a.m. on Monday, February 11, 1980.
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