

The

OCTOBER 1958

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OF THE
NATIONAL
ATHLETIC TRAINERS
ASSOCIATION



10th ANNUAL MEETING, COLUMBUS, OHIO



THE SECRETARY'S REPORT

NINTH ANNUAL MEETING OF NATIONAL ATHLETIC TRAINERS ASSOCIATION

JUNE 17, 1958

The ninth annual meeting of the National Athletic Trainers' Association, was held in the Roney Plaza Hotel at Miami Beach, Florida. The meeting was called to order at 2:30 p.m. by Chairman of the Board, Jim Hunt.

The roll call was dispensed with.

The minutes of the 1957 meeting at Lincoln, Nebraska, were approved without being read.

The treasurer's report was read along with a certified statement from the Purdue National Bank of Lafayette. It was moved, seconded, and approved that the report be accepted.

N.A.T.A. Treasurer's Report

June 12, 1958

Balance on hand June 1957 \$2,305.22

Deposits:

Dues	\$1,030.00	
Sale of Pins and Emblems.....	68.50	
Balance of Picnic Fund.....	407.15	
'57 Registration Fees	140.00	
Journal Advertisements	619.10	
Journal Subscriptions	4.00	2,268.75

Disbursements:

Lafayette Mailing Service.....	241.38	
Secretarial Work	750.00	
Postage	143.92	
Stationery, Membership Cards, Certificates, etc.	262.42	
12 Honor Award Certificates.....	60.00	
25-Year-Awards	2.00	
NCAA Dues	25.00	
U.S. Olympic Dues	10.00	
Code of Ethics (2,000 copies).....	83.35	
Expenses U.S. Olympic Meeting..	5.57	
Office Supplies	77.30	
Three issues Journal	880.28	
Dues Returns	22.50	2,563.72

Balance on hand June 1958..... 2,010.25

Checks not canceled

90.00

50.00

Certified Statement from Bank..... 2,150.25

Membership June 1958

Active	331
Associate	165
Allied	28
Advisory	53
Honorary	3
Total	580

The secretary read the report of the Chairman of the Board of Directors. At the Board of Directors' meeting, these actions were decided:

1. In the absence of Chuck Cramer, ex-officio member of the Board of Directors, Frank Cramer was invited to attend the meeting and to take part in the discussion.

2. Due to the greatly increased number of items on the Board's agenda, there will be two official meetings of the Directors each year and the Chairman may call a third when deemed necessary. One meeting will precede the National business meeting by one day. The second will be called for the last day of the National program. A quorum for the Board was established at five (5).

3. The Board of Directors will also function as a Committee on Committees with the outgoing Chairman of the Board acting as Chairman. The function of the Committee is to review all Committees; to make recommendation on such changes as seem desirable; and to specifically instruct each Committee's Chairman.

4. Each Director will be held responsible for one article for each issue of the "Journal." These articles must be submitted to him by September first of each year.

5. The National assessment for each member was increased to four dollars (\$4.00).

6. Sites for the national meeting will be selected on a year to year basis.

7. Bill Newell was re-elected as National Secretary.

8. All Committee memberships were renewed pending action of the Committee on Committees.

9. After careful consideration, the Board discussed taking the National meetings into a resort city for a second straight year. It was then suggested that Colorado Springs be withdrawn as the 1959 meeting site.

10. Five sites were taken under consideration for 1959.

Columbus, Ohio—presented by Ernie Biggs

Kansas City, Missouri—presented by Dean Nesmith

Louisville, Kentucky—

Madison, Wisconsin—presented by Walter Bakke

Hot Springs, Arkansas presented by Bill Ferrell

Columbus, Ohio will be the site for the 1959 annual meetings with District No. 4 acting as hosts. Ernie Biggs will be the program Chairman. Jackie Copeland was appointed Chairman of the Exhibiting Committee and will act as Exhibits Manager.

11. The Secretary was given permission to bill those who have not paid their yearly dues on or around May 1st of each year.

12. Duke Wyre gave a report of his visit to Washington, D. C., where he represented N.A.T.A. at the United States Olympic Association meetings. It was announced that N.A.T.A. was given Class "D" membership. No action was taken concerning this affiliation at this meeting.

The report was moved for approval, seconded, and carried.

COMMITTEE REPORTS:

HONORARY MEMBERSHIP AWARDS

Walter Bakke presented to Mike Close honorary membership and an honor award for outstanding service to the Athletic Training Profession. This action was received with a standing ovation.

TWENTY-FIVE YEAR AWARD

Porky Morgan, Chairman, announced that the following men were eligible for the twenty-five year award:

Howard Waite—University of Pittsburgh, Pittsburgh, Pa.

Julius Reichel—University of Syracuse, Syracuse, New York

Bob Peterson—University of Washington, Seattle, Wash.

Jack Williamson—University of California, Berkeley, Calif.

Herman Wrigley—Yale University, New Haven, Connecticut

A. C. "Whitey" Gwynne—University of W. Virginia, Morgantown, W. Va.

THE SECRETARY'S REPORT (Continued)**CODE OF ETHICS**

Howard Waite, Chairman, reported the writing of a letter to True Magazine in protest of an article that appeared in that magazine.

EXHIBITS COMMITTEE

Dave Wike, Chairman, apologized for the limited space for exhibits this year and announced that exhibiting space fees were raised from \$50.00 to \$100.00.

Program Chairman, Sam Lankford, was given a standing ovation for the very excellent program.

It was moved that the reports of the committees be accepted. This was seconded and carried.

The Chairman, Jim Hunt, read the progress report of the Association's Insurance plan.

From the floor:

1. It was called to the attention of the members that Doc White, veteran Athletic trainer at North Carolina University, had passed away during the past year. One minute of silence was observed in honor of the deceased member.

2. It was directed that the secretary write a letter of sympathy to the nearest of kin.

Jim Hunt presented the new Board of Directors:

District No. 1, Joe Altott, Williams College

District No. 2, Chuck Medlar, Penn State University

District No. 3, Whitey Gwynne, West Virginia University

District No. 4, Bob White, Wayne State University

District No. 5, Les Needham, Wichita University

District No. 6, Wayne Rudy, Southern Methodist University

District No. 7, Jim Conboy, U. S. Air Force Academy

District No. 8, Bob Office, University of Oregon

District No. 9, Marty Broussard, Louisiana State University

Whitey Gwynne, West Virginia University; was presented as the new Chairman of the Board of Directors.

Ernie Biggs spoke to the members about Columbus, Ohio, and next years annual meeting.

It was suggested the Secretary send to Chuck Cramer a get well telegram. This was met with unanimous approval.

The meeting was adjourned at 3:25 p.m.

William "Pinky" Newell
Executive Secretary

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of the
NATIONAL ATHLETIC TRAINERS
ASSOCIATION**

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Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.

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Williamstown, Massachusetts

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University Park, Pennsylvania

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JACKIE COPELAND

Ohio State University
Columbus, Ohio

PROGRAM NOTES
National Athletic Trainers
Association
NINTH ANNUAL MEETING
June 16-17-18, 1958
RONEY PLAZA HOTEL
Miami Beach, Florida

A very sincere and warm greeting came at 8:15 a.m. on June 16 when James Hunt, University of Michigan, National Chairman N.A.T.A. spoke to our members. He emphasized our continued growth, mentioned our recent NCAA affiliation and class "E" affiliation with the U. S. Olympic committee and our increasing ethical relationship with medicine. He proudly talked briefly of our growth and turned the meeting over the Sam Langford, University of Florida, National Program Director who promptly introduced the first speaker.

8:30 a.m.—"Knee Injuries, Care and Rehabilitation in All Sports"—Ken Rawlinson, Trainer, University of Oklahoma.

Ken kicked the annual program off with a fine talk on knees as handled at Okla. Univ. He chose to eliminate a discussion of the structural components of the knee and went right into some comment on prevention of knee injuries.

1. *Prevention—*

- a. Perhaps obvious but yet worth mentioning is that good physical condition is in itself a preventive measure.
- b. The use of oblong cleats on *all* practice shoes, this type of cleat allows the boy to button-hook easier, to cut either way without anchoring so deep, and if a side blow to the knee is received it will probably be not quite as severe because the oblong cleat does not anchor the foot as much as the conical type. Ken's comment was that the boys do not like them but he feels they have cut down on the incidence of knee injuries in *practice* at Okla. Univ. and therefore are mandatory practice equipment for *everyone*.

NOTE: Okla. Univ. *does use the regular round conical type cleat in all games.*

- c. Perhaps a quadriceps measurement is indicated during the physical examination or immediately following on all freshmen or those out for football for the first time. In the college situation, a boy may be hiding an old high school injury; as a result, he could display some quadriceps atrophy on the injured side, if he does, the old injury may be quite severe and demands examination and evaluation by the team physician. Perhaps filtering here will save the boy a lot of pain because he is probably a poor risk and also may save your surgical budget several severe blows.

Ken then commented on his handling of the knee injury once it occurs.

2. *Handling of the Acutely Injured Knee—*

- a. An elastic bandage is applied on the field for support if needed, to perhaps keep down swelling or just "so something" has been done for the boy.
- b. He is immediately transported to the training room.
- c. Upon arrival at training room, the "old tried and true" method of ice application, pressure bandage, elevation and support of part is employed.

NOTE: On some knee strains of mild appearance, (Ken picked his cases last year), he gave

10 minutes of ultra sound to the injury followed by a wet elastic bandage with ice for an hour. (Perhaps at some other date Ken will comment on his findings regarding this method of immediate therapy.) Assuming the above method or the one of ice, support, pressure, and elevation were used for one hour then—

- d. A diagnosis is attempted. It is systematic, slow and thorough. (Ken suggests watching boys eyes as they portray pain if he himself does not.) Compare injured knee to other side and look for signs of severe injury, deviation from the normal. NOTE: Also the trainer should be alert for the possible internal knee infection (within the joint) as they can appear in the form of a hot painful knee that may be coincidental to the injury or be present in a boy who "thinks" he hurt his knee on the field.
- e. After ice and elevation, a thin coating of analgesic balm is applied, *however*, if the training room staff feels there is going to be any swelling, *no* elastic bandage is applied.
- f. If indicated, the boy is sent to the team physician or is seen by him as soon as possible.
- g. If the boy is confined to the infirmary or hospital perhaps a 10:00 p.m. checks is in order.

Ken went on to comment on the use of hydrocortone by the Okla. Univ. team physicians. He stated they have been using this drug in a large percentage of acute knee injuries and Ken feels marked improvement is seen after early injection. Ken invites you to discuss the use of hydrocortone with your team physician and then if your team physician so desires to write Okla. Univ. team physician, Donald H. O'Donaghue, M.D., Okla. City, Okla., about his use of hydrocortone in athletic medicine. Also Ken emphasized, as did Dr. O'Donaghue at our convention a year ago, once decision to operate is made, do so without waiting. (Many footballers at Okla. Univ. play after knee surgery, in 1955-56 they operated 11, in 1956-57 14, in 1957-58 13. Okla. Univ. will have 14 boys that have had knee surgery and re-education of same appearing on their early practice squad this fall.)

3. *Taping and Braces—*

All knee taping when indicated is done with elastic adhesive only. A felt pad is used on "bad" knees under the common diamond type cross X support. The only knee brace used at Okla. Univ. is the "octopus" which is used some in football and quite extensively in wrestling.

4. *Knee Musculature Strengthening—*

The progressive resistive method is used or the maximum load system is employed. When using the latter, the maximum load is lifted in series of three: 10 lifts each (10-10-10). Also, the maximum load is lifted and held as long as possible then held to three more counts then boy uses good leg to help lower the bad with the load. When using PRE—the formula is as follows: Maximum lift found (example 28 lbs.), then this is divided in $\frac{1}{2}$ - (14 lbs.) and is lifted 10 times, following this effort 28 is divided by $\frac{3}{4}$ - (21 lbs.) this is lifted 10 times, then maximum (28 lbs.) is lifted 10 times. The maximum is increased when boy can lift more and the $\frac{1}{2}$ and $\frac{3}{4}$ loads increased accordingly.

In addition to weights, the boys at Okla. Univ. do 23 exercises on an active and active resistive basis. Ken did not have time to go into the exercises as used but did tell your reporter he has them on paper. Perhaps, Ken,

PROGRAM NOTES

(Continued)

here is a fine article for our Journal, the description of these exercises.

9:00 a.m.—“Enzyme Therapy,” *Fred Pasternak, M.D.*, Associate Director of Medical Research, Lederle Laboratories, Pearl River, New York.

Dr. Pasternak gave a very short interesting talk about the recent advances in the oral use and oral form of an enzyme that aids in the rapid reduction of the products of inflammatory reaction. He cited the recent use of Buccal Varidase (trade name of an enzyme produced by Lederle Laboratories) by a professional basketball team under supervision of its team physician. The drug was used according to prescription and greatly reduced the time loss from hematoma due to contusion or strain. The drug is placed inside the mouth (buccal cavity, hence name) between the inside of the lip and the areolar margin of the mandible. *It is kept there, not chewed, or swallowed*, patient is asked not to expectorate or swallow for five minutes at least, and the drug just dissolves into the mucous membranes and is absorbed. The value of this method of use of course is that injection is not needed. The drug has shown some fine results and is almost free of side effects least of all harmful ones. Your reporters comment is that here is a product of proven value that belongs *entirely in the hands* of our team physician, and by no means should it ever be used without his supervision. The one great contraindication to bear in mind is that it is never given to the “bleeder.” This type of patient should not be seen in athletics anyway having been screened out in the physical exams.

Dr. Pasternak then showed a film on inflammatory reaction and the use of buccal varidase to combat the products of hematoma formation. If I wrote fast enough in the semi-darkness the film was called, “THE BUCCAL USE OF VARIDASE,” produced by Lederle Laboratories Division, American Cyanamid Company, Pearl River, New York.

10:00 a.m.—“Shoulder Injuries, Operations and Rehabilitation,” *Robert Brashear, M.D.*, N.A.T.A. National Advisor, Team Physician, University of Tennessee.

Dr. Brashear captured his audience immediately with his interesting description of the shoulder joint. He called the shoulder a very complicated structure, a functional assembly—a loose assembly requiring powerful muscles to stabilize it.

Coordination of motor movements is so important in correct function of the joint. Dr. Brashear feels that coordination is the most important single thing in the prevention of all athletic injury and he described athletic accidents as non-preventable trauma. Muscle anomalies add to incoordination. Dislocations or recurrent dislocations usually occur on the sub-dominant side, (lt. phld. of rt. handed person). Perhaps the dislocation on the dominant side is probably an accident. Maybe we are “missing the boat” if we don’t institute some *insistence* on carrying out routine tasks and exercises on the sub-dominant shoulder group.

Our speaker then discussed some shoulder injury care. He stated that when a dislocation occurs an attempt should be made to reduce it “*right now*,” however, the trainer should be taught the method acceptable to his team physician and also have his permission to attempt reduction and if not successful, *do not* subject the boy to undue pain and effort. After reduction, the arm should be tied down at least three weeks, probably four weeks is better, to give

time for strong scar tissue formation; then accepted physical therapy procedures are instituted, range of motion done at team physician’s order.

The shoulder assembly is set up for the hand action, therefore, we must think in terms of the hand when we think of the shoulder!

Shoulder cuff injuries involve that fibrous tissue attached to the head of the humerus. Strains of the shoulder cuff are common, ruptures are rare. The subscapularis mechanism is important in preventing dislocations.

The shoulder articular capsule hardly enters in the picture in preventing dislocations because of its extensive looseness. The fairly uncommon scapulo-thoracic syndrome can present itself and when it does there is local tenderness and crepitation as the scapula slides over the thoracic portion of the trunk; the tenderness may move with the scapular. Dr. Brashear offered comment on the last mentioned syndrome as they do appear and can be helped by local injection. Dr. Brashear also commented on biceps tendonitis as being uncommon in athletics but can show up, the transverse humeral ligament is loose or there may be congenitally poor ligament and tendon, if the ligament is loose, it should be tightened down surgically. Pitchers can complain of shoulder pain especially those that throw down and away from the glenoid as in a violent fast ball pitch, this can lead to traumatic arthritis and pain from this action is present on the posterior aspect of the joint. The speaker did state in answer to an inquiry that he felt an athlete should be “nursed” through his completion in terms of recurrent dislocation and when he is done playing and the circumstances are right, the recurrent dislocating shoulder should be repaired. Dr. Brashear also talked to the men very descriptively on his methods of surgical repair of shoulder problems.

11:00 a.m.—“Low Back Injuries,” *Arthur Weiland, M.D.*, Clinical Professor of Orthopedic Surgery, University of Miami.

Dr. Weiland first spoke of low back pain and some of its causes. He said low back pain can be produced by many things. Myositis and inflammation of the low back muscles for example. Contusion associated with hemorrhage, low back sprains independent of or allied with lumbosacral instability in the acute or chronic phase; also myositis ossificans is rare but can cause low back pain. Fractures usually involve the bodies of the lower spine, many are compression fractures due to severe knifing of the spine, flexion *beyond* the normal range can cause fractures of the anterior portion of the body of the vertebrae. A fairly common fracture is of the transverse process, it being pulled off by violent muscle contraction or broken off from direct contusion. Spinous process fractures are also a possibility in low back stress or contusion.

The speaker then spoke of some congenital anomalies that can cause low back pain. Among them spondylolysis which is a structural weakness due to interruption in the contour of the neural arch, spondylolisthesis—which is a forward displacement of one vertebra on another such as the riding forward of L-5 on the sacrum. There can be an upset in the normal vertebrae count, six lumbar present instead of five for example, the sixth usually being S-1, nature did not make a clear cut decision on the relation of L-5 to sacrum or S-1 to the rest of the sacrum: instability could result. Spina bifida seen in many varieties and degrees is a developmental defect caused by failure of the vertebral arches to unite with protrusion of the cord, spina bifida occulta which is spina bifida without protrusion of the cord can also be present. Congenital anomalies can

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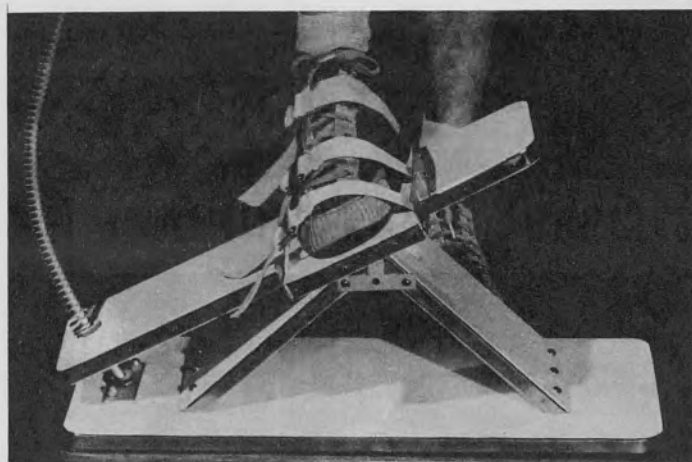


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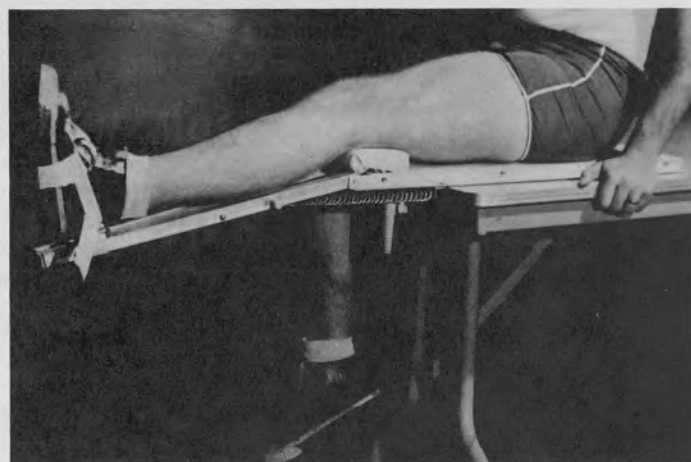
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PROGRAM NOTES

(Continued)

affect the picture regarding contact sports, if suspected an x-ray examination will reveal to what extensiveness and perhaps weeding out is indicated before serious accident and disability occurs.

Protruded Disc—Older athletes or others display a typical picture. Bent over about a month ago, hurt back a little, month or so later sciatic pain appears, local tenderness, achillis reflex is lax, some sensory disturbances are present. If conservative measures fail, bi-lateral traction is instituted, if it fails a myelogram is done possibly followed by surgery.

Dr. Weiland was asked a few questions—among them, why is a spinal fusion done: answer—to stabilize, prevent anterior slippage and get patient pain free, also how is it done: Answer—there are many procedures—Dr. Weiland usually takes some bone from the patients tibia and from the bone bank, these pieces are then mixed together and chopped in the bone-mill, this product is then packed in and around the area of repair and provides the framework for new bone cells to cling to. How about exercise in structural low back weakness? Answer—definitely under supervision, home exercises are taught, also an attempt is made to improve posture.

1:00 p.m.—“The Use of Electrical Currents in Athletic Injuries,” Howard Waite, Trainer, University of Pittsburgh.

Howard stated the purpose of his paper was to list and partially evaluate the various modalities of electro-therapy relative to traumatic conditions encountered in athletic training. No attempt was made to gauge one type above the other in efficiency or quality. Howard stressed that electrical modalities belong in the hands of those trained in their use and under the supervision of the team physician and his orders as to intensity, time, and frequency of applications should be followed. Sometimes, however, due to individual differences, slight alterations may be necessary. The trainer's judgment will determine these changes, and they should be reported to the team physician. The types of electro-therapy Howard discussed were short wave diathermy, micro-wave diathermy, ultra-sound, galvanic sinusoidal, faradic, and electronic muscle stimulators.

1. Short Wave Diathermy (s.w. dia.)—

In s.w. dia. a high frequency alternating current employing oscillations from ten to a hundred million per second is used. When applied to human tissues the energy of the rapidly oscillating current is transformed into heat energy along its path. It is generally considered a better technique to have the temperature rise relatively slow, when the temperature rise is too sudden, it can cause pain or ache in the tissue. Therefore, whenever your patient complains of a pain or ache in the early part of the treatment, it is an indication that the energy is being administered too quickly. If this occurs, turn the intensity down to the point where the pain subsides, but the heat is retained. A gentle sedative technique is considered far superior to a quick heat method.

2. Micro-Wave Diathermy (m.w. dia.)—

Here a shorter wave length and higher frequency is employed. The ability of micro-waves to be quickly absorbed by human tissue is a great advantage. Howard stated he was of the opinion that treatment of joint areas and pulled groin injuries may be treated more satisfactorily with m.w. dia. than s.w. dia., also he felt “trigger points” and nerve root irritations originating referred pain can be treated very nicely with m.w. dia.

Howard very nicely pointed out one modality is in rela-

tion to another and supplement and complement each other and he feels more than one, he personally advocates conservative administration of diathermy treatments—low intensity over a long period of time. Howard states two or more modalities should be used when treating athletic injury.

3. Ultra Sound (u.s.)—

The very newness of u.s. portrays caution. Just what effect u.s. has on body tissue has been commented on by various authorities. It has been said that when the dosage is employed therapeutically, there may be both thermal and mechanical effects. Regardless of the physiological effects, whether they be from heat or micro-massage that is produced, the end results have been good in the treatment of many athletic injuries. A general description of the physiological action is that given by Kobak: “In its broadest scope, it augments the capacity of bio-chemical response by accelerating enzyme activity. The increased capacity is interpreted as a conversion of the bound energy into free energy which elevates cell respiration, permeability and the oxidation of the many of our important biologic constituents.”

Pain should never be present during the treatment and if the patient experiences any pain, the intensity should be decreased. From the results obtained with ultra sonic therapy, the University of Pittsburgh team physician and Pittsburgh training staff consider u.s. a very vital part of the armamentarium of physical therapy apparatus.

4. Galvanic Therapy—

Galvanic current differs from the previous methods discussed as it is a low frequency current with polarity effect. The two effects from the use of galvanic current on body tissue are physio-chemical and physio-logical. The physio-chemical effects are as follows: positive pole-acid reaction, negative pole-alkaline reaction; both poles-mild heating. The physiological effects are: positive pole-hardening of tissues and decrease of nerve irritability; negative pole-softening of tissue and increase in nerve irritability; both poles vaso-motor stimulation. The acid and alkaline reaction may be described as a polar effect because it occurs only under the electrodes. It is this chemical reaction that causes “Galvanic hyperemia,” rather than the mild heat. In addition to the polar effect, there is a movement of other molecules and water content of the tissues due to the electrical charge.

When treating with medical galvanism the intensity should never be so great that it causes pain. Only slight heat and tingling sensations should be experienced. Following treatment, hyperemia may remain for several hours. This effect along with the reflex stimulation probably accounts for the relief of pain which usually occurs after initial treatment of acute sprains and bursitis.

5. Sinusoidal—Faradic—Muscle Stimulators—

These are types of low frequency currents with low voltage and usually at a rate of alternation or frequency of less than 300 per second. This type of physiotherapy can be utilized in various types of athletic injuries as an adjunct to other modalities with very good results. Muscle weakness and atrophy following injuries and surgery shows a definite need for this type of treatment. When employed with s.w. dia., w.p., or u.s., excellent results may be obtained with injuries of soft tissues.

Graduated muscle exercise is indicated to prevent adhesions following injury, prevention of blood and lymph stasis and atrophy of muscle tissue following dislocations and fractures. The use of such equipment should be in the hands of trained technicians who are familiar with muscle

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physiology and pathology. Precaution must be taken by the operator in placing the electrodes and prevention of over stimulus. Stimulation should not be prolonged to the point of fatigue, but vigorous contractions are important. This type of therapy is very good when used with other modalities up to a certain point, but *voluntary* active exercises is much better in late stages.

1:30 p.m.—“Massage in Athletics,” Jay Colville, Trainer, Miami (Ohio) University.

No one could have conceived of a better wind-up of the first day's program than to listen to the home spun philosophy and generous warm humor of the N.A.T.A.'s “Will Rogers.” Jay presented a most interesting and informative talk on massage. He started out by suggesting that we might tend to think of massage as a “lost art” and lean too much towards the modern system of automation. Jay's point was well taken in your reporter's opinion as we must not neglect to use our hands on our boys as far too many good results have been achieved by doing so.

Jay suggested an oil base preparation with antiseptic content would be a good lubricant and went on to suggest plain oil, olive oil, vaseline, talcum powder and other commercial preparations designed for the purpose. All are good lubricants and highly adequate, it being a matter of choice. The table to be used should be of the right height for the operator, 20" wide, have good padding and be sturdy. Cleanliness of room, equipment and operator is important.

As one massages his boy, he makes him comfortable, employs “gimmicks” (sand bags or pillows taped together for example) to aid him in this task and has the boy uncover. The complete relaxation of the patient is of *utmost importance*; he is made comfortable and if time permits, pre-warming of the area with an agent of your choice can be done, this invites relaxation as well as putting heat into the part to be massaged. Then start by applying a generous supply of the lubricant, have all your supplies readily available as the patient will be disturbed if you move around unnecessarily. Local rubbing in particular is done over the area in the form of effleurage (light stroking) the muscle to be massaged are stretched as you proceed with kneading, then compression of muscle to bone (gently) then come back to effleurage movements this is designed to move venous blood, has a looseness effect on muscle and has a passive effect. Ease off over pain area or when patient shows signs of flinching. Most massage is done from posterior aspect of the patient. Do not be afraid to manipulate a boy's feet and forcibly flex the boy's toes.

As for massage of the shoulder, have the boy facing you on his side, knees flexed, pillows placed if needed for comfort, the *down* arm flexed with the boy placing his head in his down hand. The *up* arm is flexed at 90° at the elbow and supported by being placed on your shoulder or on your hip, then you can work on the shoulder. Once again, pre-heating is indicated. Then loosen it up, if you feel any resistance, continue loosening the shoulder mechanism and stretch the shoulder also.

The speakers comment was that the time element varies with the time you have available and the extent of the injury and what *you want to do*!

It is your reporter's opinion that Jay's comments and suggestions were nicely presented because he did so while all the time giving a *demonstration* of what he was talking about.

tion of Knee Injury in Athletics,” and “Research in the Area of Chronic Shoulder Dislocation and Injury and Specific Progressive Resistive Exercise Procedures,” Prof. Karl Klein, Physical Education Department, University of Texas.

Prof. Klein began his presentation with a discussion of the theories of building strength.

1. Theories of Building Strength—

One should be aware of significant differences in the individual and we should not be dogmatic about a set exercise system. Strength and endurance although closely related can be built into the muscle group separately or at the same time. A muscle contraction of 20% is necessary to prevent atrophy and a loading of 37% to 40% is necessary before strength is developed. Many variable factors are present when building strength, $\frac{2}{3}$ of maximum load seems to build strength as well as maximum load lifts.

- Loss of strength is at least four times as rapid in the non-trained muscle.
- Re-conditioning is four times as fast when using good sound resistive effort.
- Non-systematized effort such as daily activity can bring strength back to near normal but it takes a program of systematic strength building to enforce the normal.

Therefore, from the above, it is apparent that we must use a systematic loading method of exercise week by week when building strength. Protective muscle strength before return to completion may very well alleviate the “hidden” fear an athlete may have about his injury and suggests that return to competition too soon without the muscle power a boy is capable of could destroy his desire for all-out effort even though he may successfully hide this fear!

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TUESDAY, JUNE 17, 1958

8:00 a.m.—“Research Related to the Problems and Solu-

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2. *Dynamics of Motion*—

Our attention was called to the quadriceps and hamstring relationship and the point is made that the hamstrings atrophy at the same rate as the quadriceps group. As one builds muscle strength, there is a tendency to build strength and density into normal ligament structure. Tendon strength is based on its relationship of size to the belly of the muscle. Once a ligament is damaged, no evidence has been presented that PRE will do anything to strengthen that ligament.

Strength building is so important and it plays a necessary part in muscle rebuilding and as such makes a major contribution to the over-all total success of surgical repair of injured joints. Unbalance of muscle strength with the subordinate side being weak shows 80% of such people are injured more severely on the weak side. (Note: this ties in with Dr. Brashear's comment.) What about the cross transfer effect?—simply the unexercised side will get stronger! Testing?—the tensiometer is important for relatively accurate measurement. This instrument is versatile, can measure 40 muscle groups. When weakness is apparent, remember it takes loading to build strength and when the tensiometer reveals weakness and unbalance, start strength building and load the muscle so strength gain is apparent. It doesn't make any difference what system you use but have a sound basis for evaluation of progress. Three sets of effort seem necessary for maximum gain. The loading can be taken up 10 lbs. a week over the starting point but when working with the knee remember the hamstring reaches its peak sooner than the quadriceps and probably at three weeks you won't be able to load the hamstrings at the same rate of advancement you load the quadriceps, therefore, a ratio of load increase must be established.

Shoulder reconditioning presents a heavy psychological problem, worry, concern, if the mirror reveals atrophy to a boy for example, he is really alarmed. So, by these simple facts, we can strengthen shoulders by a systematic program without too much urging.

Body muscle strength maintenance over a long period of time seems to be maintained longer in the legs and is lost sooner in the arm, so shoulder problems must be exercised a long time.

Three suggested exercises for maintenance of shoulder strength after clinical strength program has stopped.

1. Elbows at side, stand in front of chair or table and compress the object of choice six seconds maximum effort. This is a good subscapularis exercise.
2. Doorway exercise for six seconds maximum effort. A good supraspinatus exercise. Elbows straight.
3. Elbows straight, arms at side push a table together, maximum effort hold six seconds. A good abductor exercise. These exercises can be done on a daily basis as a strength maintenance procedure in the weak shoulder patient.

9:00 a.m.—“Foot and Ankle Injuries,” Charles Burbaucher, M.D., Athletic Orthopedic Surgeon, University of Miami, Coral Gables, Fla.

Dr. Burbaucher proceeded to classify ankle sprains into three categories. Your reporter thought his classifications of ankle trauma quite satisfactory and well done. The speaker chose three classifications, mild, moderate and severe. His comments regarding therapy were concise:

1. *Mild*—partial tear or stretching of some ligaments and its strength has not been reduced, slight swelling, mild complaints, local tenderness. X-rays reveal no abnormality. Cold applications, support and physical

therapy. Strapping continued until discomfort disappears.

2. *Moderate*—more extensive damage but not yet an actual interruption in ligament continuity, rather severe immediate pain and swelling at first local then general same with the pain. The x-ray is “usually” negative, abnormal mobility of joint not present. Treatment for this more extensive, must restore strength. Immediate pressure and ice pack three to four hours, maybe even 14 hours, elevation, these measures are to prevent further bleeding. Support important, if extensive ligament damage is revealed. Dr. Burbaucher felt a cast is indicated so that in the end result the actual period of disability will be lessened.
3. *Severe*—complete tear of ligament structure. (Most of our problems seem to be a result of forced inversion regardless of classification.) In the severe sprain, the lateral ligaments are completely torn. Findings are the same as moderate with all symptoms more marked and there will be immediate disability. Treatment the same as for moderate, however, injection indicated if desired then a cast, immobilization for four weeks is necessary. Dr. Burbaucher stated that at University of Miami, surgical intervention is not instituted unless bone injury is present. Once out of the cast regular physical medicine procedures are employed and evaluation is necessary before re-entering competition. Dr. Burbaucher stated in answer to an inquiry about strapping that he felt an athlete with a weak (previously injured) ankle in all probability had some scar tissue which is not as “elastic” as normal tissue and he should have his ankle strapped.

Dr. Burbaucher then presented some interesting slides and commentary on fractures in and about the foot and ankle.

10:15 a.m.—“Myositis Ossificans,” Jack Hughston, M.D., Orthopedic Surgeon, Auburn Team Physician.

Dr. Hughston started off with a simple definition—myositis ossificans is a calcification in the muscle. It was stated that our interest lies with the type that occurs as a result of a single injury or blow. This condition is caused by a contusion or pull on one portion of the muscle, severe in degree. An injury that is steadily getting worse in spite of all treatment attempted—there is a chance a myositis ossificans will occur or is present, other times the condition may appear without this increased soreness being present. As the normal muscle attachment to the peristeum is broken, there is now an outlet for bone forming mechanism to appear in the muscle. Usually after 2-3 weeks, a darkened shadow appears on the x-ray, this is not bone as such but is indicative of trouble. Perhaps at 5-6 weeks the x-ray will show that it is quite evident bone formation is taking place.

At 5-6 months, the disability can be quite painful as a bursa has formed between the new bone deposit and the muscle, this amounts to a bursitis in addition. Rest initially (non-weight bearing) seems to be good therapy. By so doing it is possible the bone deposit will be reabsorbed and the muscle will attach down by scar tissue.

Myositis ossificans seems to appear in the pre-college age group of athletes (high school). Treatment here in the acute phase is complete rest as soon as you can recognize damage has been done from an outside heavy blow. Perhaps the lack of college type conditioning in the high school situation predisposes to incidence on this level.

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Myositis ossificans cannot be operated early, bone must form first; probably 5-6 months after injury occurs. Post-operative results are good. The front of the thigh and front of the upper arm seem to be the almost exclusive area they occur (in quadriceps and brachiales anterior muscles) in Dr. Hughston's practice.

Dr. Hughston recommended close observation of all severe blows during treatment, if severe muscle disability continues x-ray in from 10 days to 2 weeks. If the x-ray is negative for a darkened shadow, re-x-ray after a three week period, the myositis ossificans shadow will probably start to appear and rest is indicated. After his interesting talk Dr. Hughston showed some fine slides demonstrating various sizes and location of myositis ossificans.

11:00 a.m.—"Knee Injuries—Developing and Rehabilitation after Operation," Paul Hutchins, M.D., University of Florida, Team Orthopedic Surgeon, Jacksonville, Florida.

Dr. Hutchins presented a most interesting lecture by the use of colored slides. He covered the anatomy of the thigh and knee and followed these with some very fine colored slides taken in the operating room. He showed his audience many of these slides on operating techniques and discoveries (torn cartilage, torn ligaments, joint mouse, etc.) and along with his fine commentary was most interesting and enlightening. Since the room was darkened completely, a written report of his comments was impossible.

1:00 p.m.—"Equipment—Its Care and Fitting," Wayne Rudy, Trainer, Southern Methodist Univ.

Proper outfitting cuts down injury. May your reporter add his firm agreement to that statement and go on with Wayne's talk. Perhaps there is a need for instruction in equipment fitting and purchase as a course in the Physical Education programs of our colleges as many young high school coaches are many times lost when these things suddenly become their responsibility in the high school coaching situation.

In the college environment the picture changes:

- Athletic trainers are usually consulted about the purchase of protective equipment.
- Athletic trainers are usually asked to test new equipment.
- Athletic trainers are very much concerned with proper protective equipment for the entire body.

Outfitting—

- Shoes**—Must support foot properly, afford good traction. Boy should stand up bear weight rise upon his toes with sweat socks on. Inspect the foot and toe placement. Wayne suggests the use of heavy high tops for practice, light low cuts for games. Issue shoes before boys go home in summer, then when fall practice starts, wear a new pair only 15 minutes at a time daily, then wear the old ones until the new ones are broken in!
- Pants**—Tight (snug) and durable. "Knits" to be washed regularly, web belts worn in practice pants, good knee pads. If the pants fit right the thigh pad will stay in place. Wayne suggests a heavy thigh pad in practice and a light thigh pad for games.
- Hip Pad**—Snug fit over the crest of the ilium should give adequate protection. Probably slow absorbing rubber with fiber is one of the best type hip pads.
- Shoulder Pads**—The cap should come well down over the deltoid area, make sure no neck pinch is present when raising arms, arm straps are always brought up

tight, inside cadelever on lineman, flat on the backs.

- Helmet**—The fit varies with the type. In the suspension type, the fit must be tight, the shell must never touch the head and the chin strap must always be kept tight. Helmet construction has not kept pace with the game, however, facial protection has improved as evidence the great acceptance of the single and double bar face protectors.
- Injury Pad**—Must be tight, afford protection from further damage and will require great day by day improvising by the athletic trainer.

1:30 p.m.—"The Role of Vitamins in Athletics," Lloyd Boughton, Ph.D., Director of Research, Cramer Chemical Company.

Dr. Boughton started his talk by making his audience very aware of the need for vitamin supplements. He stated that surveys seem to indicate vitamin supplement in the athletic diet is a very desired thing. Our young people today are not receiving adequate diet according to United States Government agencies. A, B, B₂ and C seem to be deficient in many areas of America. Many statistics from many studies were quoted by Dr. Boughton and all seem to indicate that our cooking habits, disposal habits and eating habits are vastly inadequate to meet the minimal daily needs of our vitamin requirement. One fairly large sampling reported 81% of families surveyed used vitamin supplements.

There is really no difference between synthetic and natural vitamins. Chemists can't tell any difference in the sugar from sugar canes or sugar beets and this can illustrate Dr. Boughton's remarks on synthetic vitamins.

Minimal daily requirements vary remarkably with individuals; sweating, size, and metabolism effect the M.D.R. Poor adaption to darkness, weakness, proneness to infection, defective teeth, loss of appetite, vomiting, impairment of wound healing, headaches, insomnia are all indications of possible vitamin deficiencies. Subclinical symptoms are numerous.

Vitamin supplements seem to be *good business!!* Vitamin C seems to be a good tool in warding off heat prostration, papers have been published to this effect; one industrial concern for example gives 250 mg. at 90°F (outside temperature) and 500 mg. at 94°F (outside temperature) or above during an 8 hour work shift. The indications are that vitamin supplement is of value to the athlete, with vitamin C alone helping in the prevention of heat prostration.

2:00 p.m.—"Pulled Muscles—Care and Treatment," Bill Dayton, Trainer, Yale University.

Muscle construction and tone permits fast movement as we do not have to take up any slack and we can react quickly. The vulnerable areas of a muscle are: the origin, the insertion, the muscle belly probably the most vulnerable, and the aponeurosis.

A tear of a muscle is an interruption of the normal outline of a muscle and tear or separation of the fibers, with bleeding and spasm.

Examination: (*Quadriceps* taken as an example)—

- What is the history?
- Inspection and palpation.
- Compare good with injured (change of contour?)
- Boy is then asked to lie on his stomach, then flex knee as far as possible, heel to buttock, this is done gradually—tightness and pain cause buttock to rise and if the boy cannot bring his heel to his buttock it is a

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good sign a tear is present.

Treatment:

1. Elastic compression bandage.
2. Elevation.
3. Ice (in acute pull).

These measures lessen the space (area of muscle torn) caused by the trauma, help to cut down on bleeding, leads to less scar and a faster recovery. Bill uses ice 2, 3, 4 or even 5 days if swelling persists at injury site, after swelling stops or if injury is not severe heat is started in all forms except whirlpool. (Whirlpool is not used because Bill feels the hematoma can be increased by immersing the part and the force of gravity comes into play but gravity would not act for example in the supine position or leg elevated position for treatment.) The next day after injury, Bill has his boys walk 4 or 5 miles therefore permitting a mild active exercise, if the boy loosens up fine; if he tightens up Bill feels he started too soon (with the walking) and must be more conservative. If he loosens up the first day with the walking, the second day the athlete is told to jog, if he can take this but tenderness persists *heat* is started. This is the gauge Bill uses.

If the muscle "pull" persists in the form of swelling and pain after the first day or so, the athlete is sent to the school infirmary under the care of the school physician. Here elevation and rest are continued along with the physician's orders.

Tears at the muscle-tendon junction seem to swell less but can be more disabling, heat may be started earlier but an attempt is made to close the gap (at injury site) by support or for example, in the case of a gastrocnemius tear, a rubber heel is placed in the shoe to shorten the length of the gastrocnemius.

Stretching of the sore muscle is started soon after injury. Bill states that improper warm-up and non-stretching is probably our prime causes of muscle pulls. Stretching exercises should be incorporated in *all* warm-up drills and calisthenics. For practice sessions, a compression bandage or a combination compression bandage and warm pack is used. Bill does not feel circular taping is of value.

WEDNESDAY, JUNE 18, 1958

8:00 a.m.—"Head Injuries in Athletics," Dave Wike, Trainer, University of Miami, Coral Gables, Florida.

Probably the most feared injury in athletics is a brain concussion. The word "concussion" means very little, medically speaking; however, it does indicate that there has been mechanical shaking of the brain to some degree. Dave stated it was not in the scope of his paper to discuss any of the mechanics or pathological entities of brain injuries, but rather to present some procedures in the management of an athlete who has suffered a concussion.

Let us first consider the player who has been knocked unconscious. We may consider a boy unconscious when he has been observed for any period of time during which he is completely unaware of and does not react normally to his external environment. Unconsciousness following a blow to the head may last but a few moments, yet in some of these cases the brain damage may prove to be serious. All cases which have been unconscious for any period of time should be seen by a physician immediately. This, of course, means no further participation until the individual has been cleared by the attending physician.

If there is bleeding from the mouth or vomiting, it will be necessary to move the person to a position on his abdomen and turn the head to one side. This will permit the blood or vomitus to be expelled more freely. Be on the

alert for convulsive seizures during which he may begin to chew his tongue causing bleeding and unnecessary injury to the mouth. Always have a soft, but firm object on your person that can be placed between the teeth; this will prevent such damage and also makes for a clear air passage.

If, after approximately two minutes, the individual does not begin to regain consciousness, make preparations to have him removed by ambulance service. Move him but once; delay the game if necessary. While waiting for the ambulance, treat him for primary shock. Know ahead of time the telephone number of the ambulance service, (paste it on or near your phone) and know, having previously consulted your team physician ahead of time, where just such a case should be sent.

Now let us consider another type; one who is semi-conscious or badly shaken up. It is here that we must be extremely careful as sometimes a sign or symptom can be overlooked. If this would be the case, further possible brain damage may follow or some other injury may occur due to the individual's inability to *react normally*.

The first symptom to observe in a boy with a concussion is amnesia. Authorities say, "the first mental process of the brain that disappears after injury is the memory—memory for recent events."

The eyes can tell you quite a story but you must read carefully. Dilation or constriction of one or both pupils is a sign of trouble. By using the light reflex test, you can see if the pupils are reacting normally. Other signs of the eyes are *nystagmus*, a vertical or horizontal jerking of the eyeballs. *Strabismus*, the inability of both eyes to be directed toward an object is due to the lack of coordination of the eyeball muscles. Beware of half-vision, when the boy complains he isn't able to see the things out to the side of him (loss of peripheral vision). Of course blurred vision must always be considered.

It isn't unusual for these cases to become very restless or extremely quiet. Perhaps a state of hysteria may manifest itself. General muscular coordination must be noted, complaints of nausea and vomiting, as well as headache and dizziness are to be considered dangerous. If after two or three minutes any one of these signs appear do not play the boy and seek a physician. Care for your boy without panic or haste, give him your immediate and undivided attention—but do it in a manner that doesn't cause him to become overly excited or frightened.

I use a methodical approach to an obvious concussion on the field. First, take your time (no official can order you off the field under these circumstances.) See that his air passages are clear. Drip cold water to the back of the neck and wait for the boy to make the next move. At this time, I quietly call him by name and note his reactions. As a further test, I ask him to remove his head-gear as I look into his eyes and for any other associated injury. I ask him a few pertinent questions about recent happenings, if the boy does not respond normally and quickly he must be removed from the game for further examination. Coming off the field, note his gait and posture. I might add at this point, a case that can't get up and move with normal or near-normal ability should be carried from the field on a stretcher. I am referring to these pathetic "do-or-die" marches to the sidelines. This is no good for the game nor the profession. Have the boy sit on the bench away from the other players where he can be at ease and seen by the team physician.

This brings us to the third type or classification of concussion recognizable in athletics. This is the mild type

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where the player has been momentarily shaken-up and after approximately two minutes shows no signs or symptom as stated above is considered a safe risk to continue playing.

IF AT ANY TIME, AFTER A CONCUSSION, THE CASE HAS BEEN RELEASED BY THE DOCTOR AND A VIOLENT HEADACHE DEVELOPS, GET HIM TO THE DOCTOR IMMEDIATELY. IT IS HERE, SEVERAL DAYS LATER, WHEN A SUBDURAL HEMOTOMA MAY DEVELOP AND CAUSE DEATH.

8:30 a.m.—“Shin Splints,” Warren Ariail, Trainer, Wake Forest College.

A very controversial subject in regard to the pathology of this condition. We realize that a hard running surface and the use of certain muscles in pre-season conditioning establish the cause. Nevertheless, you do not find a hematoma, bad edema, or a contused area. Even though the circulation is very poor around the shin, all that you find is a point of extreme sensitivity, usually on the medial aspect of the tibia.

Thorndyke says that the pathology of shin splints “is a tearing of the origin of the tibialis posterior from the tibia in its lower third.” Morehouse and Raush say, “The interosseus membrane lies between the tibia and the fibula and provides stabilization and along with the periosteum covering the bones serves as attachments for the six flexor muscles of the foot and toes. Pull of muscles against the interosseous membrane and periosteum tears the muscle origins away from the bone. This damage termed irritative myositis occurs especially at the origin of the tibialis posterior, where it arises from the posterior and medial surface of the upper two thirds of the tibia.” Dr. Lipscomb whom Warren stated spoke at their District III meeting in Roanoke, Virginia, said “Shin splints on the lateral side are the tibialis anterior muscle and on the medial side is periostitis.”

Frankly speaking, the views are conflicting, as many doctors have expressed the opinion that the fascia causes part of the traumatic condition.

Treatment:

1. Warren recommends whirlpool for 20 minutes at 108° F., then leg is placed in the parafin bath from 10 to 20 minutes at 126°F. The next phase is to apply a hydrocolator steam pack for 10 to 15 minutes. After this, we give five minutes of ultra-sonic at 1.5 per square centimeters.
 2. For daytime hot packs Warren uses Sta-fit liniment wet dressings. The liniment is applied to the tender area. Then ice cold wet gauze and an elastic bandage is wrapped over that and anchored in place. At night an analgesic pack is put on with a combine roll and an elastic bandage.
- These treatments are followed through each day and occasionally we'll use cold applications by contrasting the hydrocolator packs with hot and cold packs and add the diathermy as another modality. NOTE: (Warren stated his orthopedic surgeon injects xzolocaine and hydrocortosone to the severe and chronic cases and that it has been quite beneficial).

Taping:

For participation activity Warren uses a modification of the type job created by Mississippi State's fine trainer “Dutch” Lutchsinger. Around the longitudinal arch Warren puts three strands of 1½” tape. Then he puts four strips of 1½” tape starting from the lateral malleolus com-

ing above the achilles tendon and applying extra tension to the medial side of the tibia. Then he does the same thing starting from the medial side of the ankle and bringing the four strands of 1½” tape up and around to the lateral aspect of the tibia. (If you use 2” tape, Warren suggests three strips are enough on each side.) Warren puts anchor strips on the lateral and medial malleolus and on the gastrocnemius. Finally, two narrow strips of foam rubber are placed on each side of the tibia and anchored with elastic tape 2” wide, using three strips and applying it in a reverse spiral to eliminate the possibility of constriction. NOTE: Warren uses foam rubber heel pads for both heels, as he feels that if a boy walks around with heels on his shoes all day then he should have some support when working out with shoes that have no built up heels. It is very important to always remember that heel pads should be used for each foot, because if you use just one on the affected side, you are asking for sacro-iliac trouble as you are throwing the pelvic girdle off.

9:00 a.m.—“Drugs in Athletics,” Henry Andel, Trainer, Georgia Tech.

The N.A.T.A. went on record in its national meeting at Lincoln, Nebraska, in June '57 concerning its stand toward the use of drugs in the training of the athletes in their care. The reasons for making such declarations centered around the use of artificial stimulants to delay onset of fatigue, which may damage the athlete by pushing him beyond his normal limit of endurance. In recent years with the four minute mile and other records becoming commonplace, it has been generally acknowledged that stimulants were being used rather extensively throughout the world. The trainers are extremely concerned with the possible physiological damage attributed to the use of chemical agents that do not come under the category of dietary supplements such as vitamins, minerals and glucose. From the medical aspect, the athlete should be safeguarded against the illegal use of drugs that may improve performance but cause physiological and psychological effects detrimental to his health. We have laws to protect the unwary, but unfortunately the unscrupulous will provide the means of obtaining and administering the harmful substances when winning or record performances are more important than the health of the individual. In athletic competition, where the abilities of the man are being tested against another's abilities, the use of drugs to influence the performance of the individual is also unsportsmanlike and degrading and wholly undefensible.

“Buck” went on with his presentation urging the trainer to keep abreast of what is offered to the medical people, and that the physician *should direct* the administration. A line must be drawn as to what we can do as trainers in the use of well known as well as new drugs. Although the Amateur Athletic Association has put a ban on the use of drugs to produce better athletic performances, the trainers and doctors will be in no way criticized for using such commonly known stimulants when they are not used in quantities that detract from the physical well-being of the athlete. Therefore, it is sufficient to say that good judgement must be employed in the use of any kind of preparation in that any may have an ill effect on some individuals.

In a recent survey by the American College of Sports Medicine concerning the use of drugs of a possible harmful nature in collegiate sports, 92% of the trainers, coaches and physicians answering the questionnaire indicated they opposed the use of such drugs in collegiate sports. “Buck” stated we are in this thing to prepare and repair healthy

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bodies and can take no stand except in opposition to anything that is contrary to our objectives.

"Buck" then offered some of the drugs in use in athletic medicine and a description of same.

1. Drugs Affecting Absorption of Hemotomos and Edema
 - a. Chymar Aqueous (Armour Laboratories)
 - b. Wyadase (Wyeth)
 - c. Alidose (Searle)
 - d. Varidose (Lederle)
 - e. Hydextra T.B.A. (Merk)
2. Drugs for Relief of Muscle Spasm
 - a. Robaxin (Robins)
 - b. Arlidin (Arlington-Funk)
 - c. Desipal (Riker)
 - d. Flexilon HC (McNeil)
3. Drugs for Relief of Pain
 - a. Darvon (Lilly)
4. Drugs Affecting the Central Nervous System
 - a. Benzedrine (Smith, Kline and French)
 - b. Dexedrine (Smith, Kline and French)

NOTE: These drugs here presented are what is being used at Georgia Tech under the supervision of the team physician; and should by no means be misconstrued as an endorsement of any particular pharmaceutical house's product.

9:30 a.m.—"Injuries in Baseball," Don Faults, Trainer, Florida State University.

Don gave a very well received talk on baseball training techniques that has been long overdue. Following are the highlights of his presentation.

1. The importance of stretching the pitcher's arm, before the game. This is done to cut down on the number of pitches he will have to throw in order to be properly warmed up. It is Don's feeling, that by doing this, we will have saved those pitches for later in the game, when he may need them. Don states that he feels that a pitcher only has so many good pitches in his arm on a given day and it is more advantageous for the pitcher and his team to use them in the game rather than on the sideline. Don has more than justified this stretching of a pitcher's arm which to some may be controversial.

2. Milking down the pitcher's arm after he has pitched. This is done by having the pitcher lying on the table with his pitching arm raised in the air. An object suspended from the ceiling that the pitcher can hang on to is a good aid. Then Don massages the arm, starting from the biceps area and working toward the wrist. This is done to aid in the elimination of waste products resulting from the strenuous work the arm has done. The pitching arm will be larger than the other arm due to the build up of lactic acid and the presence of excess blood. The quicker these excesses are eliminated, the quicker the recovery.

3. Eliminating blisters on the middle finger of the pitching hand. The medial side of the nail on the middle finger of the pitching hand is usually pointed. The pressure of the baseball against the soft tissue of the finger will cause the point of the nail to penetrate the soft tissue, causing a blister. It is a case of a soft substance being compressed between two hard surfaces. The nail on this finger is never cut, but, ALWAYS FILED. The filing eliminates the point, thereby eliminating the possibility of a blister.

10:10 a.m.—"Team Physician Views in Athletics," William McChesney, M.D., University of Florida, Team Physician.

Dr. McChesney started his talk with a fine statement that your reporter liked and that is that the team physician and trainer must share the responsibility of keeping each other informed about injury progress. Understand and have confidence in each other. The doctor stated that the trainer has a big responsibility towards his boys in terms of counsel as the trainer's position is almost unique in that the very environment of the training room affords relaxation and comfort to the athletes.

The trainer should not assume undue responsibility by second guessing the treatment before the team physician sees an injury, but rather let him handle the case and follow his suggestions from there. Dr. McChesney emphasized the use of written records and stated that a trainer does not criticize the doctor and vice versa. The trainer should exercise rigid control over the use of anti-biotics and aseptic drugs and Dr. McChesney hoped the trainer would not abuse the team physician's right to judge the use of drugs which is as it should be.

10:30 a.m.—"Shoulder Injuries and Dislocations," Duke Wyre, Trainer, University of Maryland.

"Duke" was brief, concise and informing. He spoke briefly on clavicle fracture or dislocation in that such an injury belongs to the team physician. In an A-C separation, the ligament takes three weeks to heal, the joint rarely ever tightens down as the ligament heals, scar tissue formation causes a lengthening of the ligament and as a result the joint is fairly unstable. After an A-C separation occurs, a sling is used and an adhesive strapping is applied for 5 to 6 weeks. The athlete can receive daily infrared and have the strapping continued because the ligament must be relaxed to heal. Also, arm lift type of strapping plus the sling can take the strain off the joint.

When you tip your hat you are more than 75% out of the glenoid fossa. When a dislocation occurs if you have the team physician's permission to attempt one reduction, by all means do so, if not successful, let the team physician reduce it. After reduction, the arm is placed in a sling, during this time the patient can do exercises with the non-affected arm as it will help the blood supply to the other shoulder and perhaps aid in the maintenance of muscle tone.

In nerve pinches and trauma around the shoulder, the neck should be held in a fixed position. A felt collar or shoulder pad improvisation can achieve this. (A tight shoulder mechanism might preclude a nerve pinch or a muscle pinching a nerve after being struck are examples of etiology.) The use of a shoulder harness when returning to full go after nerve trauma is imperative. Violent head thrusts to the side can cause cervical and brachial plexus injuries, here again restriction of neck range of motion is necessary.

The preceding program notes are a result of the three day meeting at Miami Beach. I wish to inform the reader that I do not feel they are a complete recording, nor do they bind me as to complete accuracy. Some of the presentations were rather long, some short, and some with the use of audio-visual aids. In some instances due to circumstances beyond my control the report of a given presentation has been shortened.

"Bob" Grant, Ass't Trainer
Purdue University

ANNUAL MEETING OF SOUTHWESTERN ATHLETIC TRAINERS



The Southwestern Athletic Trainers Association held their Annual Meeting at Southern Methodist University, Dallas, during August, 1958.

The above photo shows some of the officers of the Association. L to R: Wayne Rudy, N.A.T.A. Director; Robert Brown, President of S.W.A.T.A.; William Pickard, Secretary-Treasurer of S.W.A.T.A.; Don Bennett, Publicity Director of S.W.A.T.A. Weaver Jordan, Vice President was not present when picture was taken.

Several important awards were presented at the meeting, honoring members for work or services performed.

Elmer Brown was given the Featherlax Corporation Award for the outstanding speech given by a trainer at the 1958 Clinic.

Wayne Rudy was honored by winning the W. A. Holt Award, for his work as the trainer who had contributed most to the S.W.A.T.A.

The Southwestern Fidelity Life Insurance Company Award, for the company representative who contributes most to the S.W.A.T.A. was given to Chuck Yocum of Becton Dickinson Co.

All of these handsome plaques were presented by Lester Jordan, Publicity Director of SMU.

The photo below shows a part of the group that attended the S.W.A.T.A. annual meeting.

TENTATIVE SUBJECTS FOR 1959 NATIONAL PROGRAM

Ernie Biggs, National Program Chairman, has released the following areas to be covered in the 1959 meeting which will be held in Columbus, Ohio.

1. Foot and Ankle Injuries.
Anatomy, Etiology, Pathology, Prevention, Treatment.
2. Knee Injuries.
Anatomy, Etiology, Pathology, Prevention, Treatment.
3. Panel on Foot, Ankle and Knee Injuries.
4. Water and Salt Metabolism.
5. Management of Soft Tissue Injury.
Muscular, Hematoma
6. Panel on Unusual Injuries in Athletics.
7. Head Injuries.
8. Skin Diseases Commonly Seen in Athletics.
9. Harmful and Side Effects of Drugs.
10. Psychological Aspects of Therapy in Athletics.
11. Indications for Therapeutic Modalities. Use of Cold.
12. Shoulder Girdle Injuries.
13. Dieting, Weight Control and Conditioning in Athletics.
14. Pathology of Trauma.
15. Elbow, Wrist and Hand Injuries.

All injury areas will be followed by a panel consisting of two trainers and two doctors.





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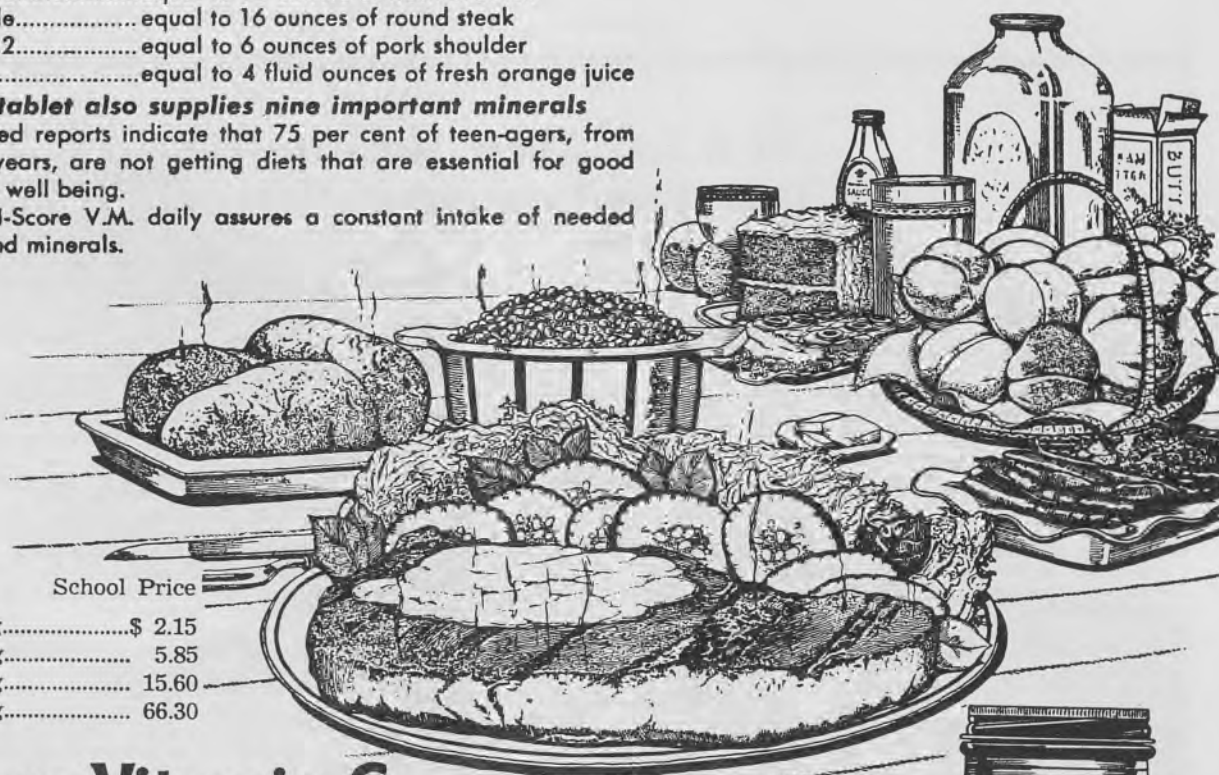
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Riboflavin (B-2).....equal to 35 ounces of dried beans
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T. Nelson Metcalf, Chairman of Selection Committee



Who said the new coach isn't handsome? I said I don't like his looks—those he gives me!

N.A.T.A. Clinic Registration

15-16-17 June 1958, Miami Beach, Florida

Altott, Joseph R., Williams College, Williamstown, Mass.
Andel, Henry "Buck," Georgia Tech., Atlanta, Ga.
Ariall, Warren "Floogle," Iowa State, Ames, Iowa
Bakke, Walter, University of Wisconsin, Madison, Wis.
Biggs, Ernest, Ohio State University, Columbus, Ohio
Blankowitsch, Joe, Allentown High School, Allentown, Penn.
Blickenstaff, Mel, Columbus High School, Columbus, Ind.
Boughton, Lloyd L., Cramer Chemical Co., Gardner, Kans.
Brashear, R., M.D., University of Tennessee, Knoxville, Tenn.
Brown, Bobby, Houston Public Schools, Houston, Tex.
Butt, Dr. Jack, University of Arkansas, Fayetteville, Ark.
Byrd, Gene, Wilson Sporting Goods
Carter, George, 33167 Raphael, Farmington, Mich.
Christman, George H., Kent State University, Kent, Ohio
Close, Mike, MacGregor Company, Cincinnati, Ohio
Coble, Dave, Wilson Sporting Goods Co., Miami, Fla.
Cochren, Donald, Purdue University, West Lafayette, Ind.
Collins, Roosevelt, Colorado College, Colorado Springs, Colo.
Colville, Jay, Miami University, Oxford, Ohio
Conboy, Jim, U. S. Air Force Academy, Denver, Colo.
Cook, James, Cramer Chemical Co., Gardner, Kans.
Cook, Marshall, Montana State College, Bozeman, Mont.
Copeland, Jackie, Ohio State University, Columbus, Ohio
Cramer, Bill, Cramer Chemical Co., Gardner, Kans.
Cramer, Frank, Cramer Chemical Co., Gardner, Kans.
Davis, Otho L., Kent State University, Kent, Ohio
DeMauro, Daniel, 1702 N-G 7th Terrace, Ft. Lauderdale, Fla.
DeWitt, Peter B., Cranbrook School, Bloomfield Hills, Mich.
Diehm, L. F. "Tow," University of New Mexico, Albuquerque, N. M.
Dorsett, Wayne E., Johnson and Johnson, New Brunswick, N. J.
Duvall, J. R., Wilson Sporting Goods Co., Miami, Fla.
Fauls, Don, Florida State University, Tallahassee, Fla.
Ferrell, William R., University of Arkansas, Fayetteville, Ark.
Gibson, Ted, Union Twp. High School, New Castle, Penn.
Gill, Jim, Wilson Sporting Goods Co., River Grove, Ill.
Graham, Jimmie, Rawlings Sporting Goods, St. Louis, Mo.
Grant, Bob, Purdue University, West Lafayette, Ind.
Greathouse, Brady, University of Tampa, Tampa, Fla.
Griess, Alfred, M.D., Penn State University, State College, Penn.
Grockowski, Walter, Wesleyan University, Middletown, Conn.
Grubiss, Hugh, Cramer Chemical Co., Gardner, Kans.
Gunn, Bobby, Robert E. Lee High School, Baytown, Tex.
Gwynne, A. C. "Whitey," W. Virginia University, Morgantown, W. Va.
Harper, Smokey, Texas A & M College, College Station, Tex.
Haynie, George, Johnson and Johnson, Miami, Fla.
Healion, Tom, Northwestern University, Evanston, Ill.
Henry, Charles, Ft. Lauderdale, Fla.
Hershey, Merrill, Eastern Michigan College, Ypsilanti, Mich.
Hessel, Aaron, Featherbite, Houston, Tex.
Hoover, Fred, Florida State University, Tallahassee, Fla.
Howell, Hornsby, North Carolina A & T College, Greensboro, N. C.

Hunt, Jim, University of Michigan, Ann Arbor, Mich.
Hutchins, Paul F., M.D., University of Florida, Jacksonville, Fla.
Hutchins, R. E., 9500 SW 94 Ct., Miami, Fla.
Johnson, Roger "Swede," Purdue University, West Lafayette, Ind.
Jones, Blandford, Rehabilitation Center, Pottsville, Penn.
Jones, R. Earl, A. G. Spalding, New York
King, William F., Wilson Sporting Goods, Miami, Fla.
Kosalko, Henry, Whiting High School, Whiting, Ind.
Lankford, Sam, University of Florida, Gainesville, Fla.
Lawless, John J., M.D., West Virginia University, Morgantown, W. Va.
Loef, Jack, 351 Sturges, Elmhurst, Ill.
Luchsinger, W. J. "Dutch," Miss. State College, State College, Miss.
Lundy, Robert, Boston University, Boston, Mass.
McChesney, W. W., M.D., University of Florida, Gainesville, Fla.
McDowell, Charles Wm., McCallie School, Chattanooga, Tenn.
McMullen, Warren, Rt. 1, Box 405, Clearwater, Fla.
Martin, Frank L., Denison University, Granville, Ohio
Martin, Lewis, Furman University, Greenville, S. C.
Moore, Ross, Texas Western, El Paso, Tex.
Morgan, Dick, Rawlings Sporting Goods, St. Louis, Mo.
Morgan, Porky, Kansas State University, Manhattan, Kans.
Mundy, Harold W., Athletic Training Room Supps., Detroit, Mich.
Nesmith, Dean, Kansas University, Lawrence, Kans.
Newell, Wm. "Pinky," Purdue University, West Lafayette, Ind.
Noonan, Edward, Harvard University, Cambridge, Mass.
O'Brien, Mickey, University of Tennessee, Knoxville, Tenn.
Pasternack, Fred, M.D., Lederle Laboratories, New Orleans, La.
Payne, John W., University of Kentucky, Lexington, Ky.
Ploch, Dr. James C., 759 S. Ky. Avenue, Evansville, Ind.
Pond, "Ducky," Seamless Rubber Co., New Haven, Conn.
Porche, Bubba, Tulane University, New Orleans, La.
Reichel, Jules, Syracuse University, Syracuse, N. Y.
Reinstatter, R. R., MacGregor Co., Orlando, Fla.
Richwine, Sam, University of Georgia, Athens, Ga.
Ricker, Larry D., Akron University, Akron, Ohio
Roussos, Socrates, Union Twp. High, New Castle, Penn.
Smith, Russel A., Niagara of Coral Gables, Coral Gables, Fla.
Sparks, Don, University of Tulsa, Tulsa, Okla.
Stebbins, Richard, Boston University, Boston, Mass.
St. Germain, Jack, Johnson and Johnson, Chicago, Ill.
Walte, Howard, University of Pittsburgh, Pittsburgh, Penn.
Watson, Wayne, Bike Web Company, Atlanta, Ga.
White, Robert, Wayne State University, Detroit, Mich.
Wike, Dave, University of Miami, Coral Gables, Fla.
Wilson, Tom, University of Houston, Houston, Tex.
Witkowski, Steve, Wesleyan University, Middletown, Conn.
Wojecki, Eddie, The Rice Institute, Houston, Tex.
Wyre, A. J. "Duke," University of Maryland, College Park, Md.
Yocum, Charles H., Becton and Dickinson, Rutherford, N. J.
Zingaro, R. C., Niagara of Coral Gables, Coral Gables, Fla.

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