THE JOURNAL
of the National Athletic Trainers Association
SPRING 1967
Volume 2
Number 1

NATIONAL CONVENTION
Columbus, Ohio June 12-14, 1967
The Choice of the
Cramer
Nation's Best Trainers
saves injury...
saves money

new
Orthaletic®
Trainer’s Tape
in the new, economical Team Pack

Specifically designed for prevention and care of athletic injuries, ORTHALETIC Trainer’s Tape features strong backing cloth, water-resistant finish, high-quality adhesive, uniformly applied and bonded, and special “easy-tension” winding. One TEAM PACK contains 32 rolls of 15 yards—enough to strap the ankles of 32 men. And the compact case is easy to handle at home and on the road.

Other special-purpose tapes include: BayHesive® for high tensile strength and BayConomy®, a lighter weight adhesive tape.
for PROTECTION • SUPPORT • COMPRESSION

THE TRAINERS’ FIRST CHOICE FOR PRE-GAME AND PRE-PRACTICE STRAPPING
TO HELP AVOID INJURIES TO ATHLETES

ELASTOPLAST “AT” Athletic Elastic Adhesive Tape adheres firmly...

Has Superior Stretch—from 3 yards slack to approx. 5½ yards—and unexcelled Contraction...

Assures players freedom of action.

<table>
<thead>
<tr>
<th>ELASTOPLAST TAPE TUBE PACKING</th>
<th>12” x 5½ yards (stretched)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order Numbers:</td>
<td></td>
</tr>
<tr>
<td>410-AT</td>
<td>12 rolls 1&quot; cut</td>
</tr>
<tr>
<td>411-AT</td>
<td>8 rolls 1½&quot; cut</td>
</tr>
<tr>
<td>412-AT</td>
<td>6 rolls 2&quot; cut</td>
</tr>
<tr>
<td>413-AT</td>
<td>4 rolls 3&quot; cut</td>
</tr>
<tr>
<td>414-AT</td>
<td>3 rolls 4&quot; cut</td>
</tr>
</tbody>
</table>

Case lots of 12 tubes of same cut available at institutional discount.

Duke Laboratories, Inc.
South Norwalk, Conn., U.S.A.

Elastoplast—Made in U.S.A.—The Original E-L-A-S-T-I-C Adhesive Tape and Unit Dressings
CONTENTS

Shin Splints: The Trainer's Point of View ................. 8
   Elvin C. Drake, LPT

Shin Splints: Prevention and Rehabilitation ............... 9
   Karl K. Klein

Know Your Directors ...................................... 12

DIRECTORS

District 1—FRITZ MASSMAN
Boston College
Chestnut Hill, Massachusetts 02167

District 2—EDDIE SULKOWSKI
Pennsylvania State University
University Park 16802

District 3—JAMES I. PRICE
University of South Carolina
Columbia 29208

District 4—MILLARD KELLY
Detroit Lions
Detroit, Michigan 48216

District 5—C. RAY BICKERSTAFF
Iowa State University
Ames 50002

District 6—ROBERT H. GUNN
Lamar State College of Technology
Beaumont, Texas 77704

District 7—ROBERT BEETEN
Idaho State University
Pocatello 83201

District 8—WILLIAM H. CHAMBERS
Fullerton Junior College
Fullerton, California 92634

District 9—BUBBA PORCHE
Tulane University
New Orleans, Louisiana 70118

District 10—MERTON PROPHET
Toronto Argonaut Football Club
Toronto, Ontario

Executive Secretary:
   WILLIAM E. NEWELL
Purdue University
3315 South Street
Lafayette, Indiana 47904

The Journal of the National Athletic Trainers Association is published quarterly at Lafayette, Indiana 47901. Subscription charge to members: $1.00 per year.

Editor: MARVIN ROBERSON. Advertising manager: ELLIS MURPHY, 600 South Michigan Avenue, Chicago, Ill. 60605.

Second class postage paid at Lafayette, Indiana 47901.

All communications concerning editorial matter in The Journal should be directed to Marvin Roberson, 165 Smith Field House, Brigham Young University, Provo, Utah 84601.

The NATA Journal editors welcome the submission of articles which may be of interest to persons engaged in or concerned with the progress of the athletic training profession. The following suggestions are offered to those submitting articles for consideration:

1. All manuscripts should be typewritten, double-spaced, on ordinary typing paper.
2. When references are made to other published works, include superscript numerals and appropriate footnotes giving author, title of book or article, periodical or volume number, pages, and date of publication.
3. Photographs must be black-and-white prints, preferably on glossy paper. Graphs, charts, or figures should be clearly drawn on white paper, in a form which will be readable when reduced for publication.
4. It is the understanding of the Journal editors that any manuscripts submitted will not have been published previously. Unused manuscripts will be returned when accompanied by a stamped, self-addressed envelope. Please address contributions to the Editor.
WHEN YOU HAVE TO GET THE SORENESS OUT IN TIME FOR THE MEET...

...Bike training room supplies get the job done fast! Our labs are working on problems like yours all the time. They've found an exclusive for our Analgesics that really hurries a boy back into shape. They put a germicidal and fungicidal in our fine Skin Toughener. A special fungus fighter gives our Anti-Fungal Spray real speed and power. Makes our Foot and Body Powder work better than most, too. And our First Aid supplies are the finest money can buy. So to treat injuries or prevent them... look to Bike training room supplies.

BIKE DELIVERS ALL THE GOODS.

TRAINERS TAPE • SUPPORTERS • MOUTH GUARDS • FIRST-AID SUPPLIES
Shin Splints:
The Trainer’s Point of View

ELVIN C. DRAKE, LPT
Head Trainer, UCLA Athletic Department, Los Angeles, California


The athletic trainer is in a position to see athletic injuries in a different light than the physician. He is with the men on the field and in the training room every day. He supervises the every day care of the injured. The trainer should be so close to the athlete that the athlete feels that he can confide in him concerning any of his troubles.

“Shin splints,” although not an injury which can be observed, is a very annoying and painful problem in athletics. The condition may be caused by several things:
1. Running on hard surface.
2. Poor biomechanics in running.
3. Pre-existing foot or arch problems.
4. Running over uneven terrain (as in cross country running).
5. Over-exertion without proper conditioning.

Shin splints are not limited to one sport. We find them in any sport where there is a lot of running, e.g., track, football, basketball, and baseball. To give some light on this subject, a questionnaire was sent to and returned by over thirty (30) athletic trainers in the country. This survey was conducted to provide a collective opinion on shin splints which reflects the thinking of experienced trainers. The questions asked were:

Question 1: What do you think shin splints really is?
Question 2: What are your findings at examination?
   (a) Where is the tenderness?
   (b) Is there swelling?
Question 3: What are the boys’ complaints?
Question 4: What movements of the foot cause pain?
Question 5: How do you care for this condition?
Question 6: What taping do you use, if any?
Question 7: Do shin splints go away after, or do they last all season?

The answers received indicated quite a difference of opinion and that the trainers too are still searching for the answers. As a summary to the questionnaire, and to add some of my own personal opinions:

1. Most trainers believe shin splints are an inflammation, or possibly a slight strain of the anterior and/or posterior tendons of the tibialis and/or the interosseous membrane, or perhaps a combination of the two.
2. On their examination they find pain along the medial border of the tibia. There is typically very little swelling except in severe cases.
3. The boys usually complain of an aching pain when walking, running, or climbing stairs. This pain is not always noticeable when actually running hard, but there is pain immediately on stopping.
4. The pain is most noticeable on plantar- or dorsiflexion of the foot. Usually they have pain along the crest of the tibia over an area of 3 or 4 inches and sometimes more.
5. If pain centers in a small localized area, X-rays should be taken to rule out the possibility of a fatigue fracture. (We at UCLA have taken X-rays every week over a period of 4 or 5 weeks before a fatigue fracture actually showed; sometimes it did not show until there was a formation of callus.)

Treatment varies a great deal but moist heat is used in most cases (primarily hydrocollator packs and whirlpool). Most trainers recommended rest; but with each day away from practice, there is loss of the level of conditioning that the athlete had worked many hours to acquire.

In my own experience, moist heat and exercise works best. We use stretching of the calf muscles

1. The Standard Nomenclature of Athletic Injuries (AMA, 1966, p. 126) describes Shin Splints in the Glossary as “Pain and discomfort in leg from repetitive running on hard surface or forcible excessive use of foot flexors; diagnosis should be limited to musculotendinous inflammations, excluding fatigue fracture or ischemic disorder.”

(Please turn to page 11)
Shin Splints: Prevention and Rehabilitation

KARL K. KLEIN
University of Texas

Reprint from TEXAS COACH January 1964
as printed in MEDICINA DELLO SPORT February 1966

The definition of "Shin Splints" is couched in many ways, varying from simple lay statements to precise medical terminology.

The lay definition is expressed in terms of the shin bone and related muscular attachments to the anterior section of the lower leg.

Team physicians medically define the problem as follows:

1. "A clinical phenomenon most probably a traumatic periostitis resulting from abnormal traction of the foot and toe muscles created at the point of origin from the tibia."
2. "Any pain occurring in the anterior tibial muscle compartment and the adjacent tibias and fibula, following running or jumping. The presence of anterior tibial compartment pain suggests one of the following conditions: (a) stress periostitis at the ligamentous attachments of the anterior tibial muscle group, (b) anterior tibial muscle group myositis, (c) anterior tibial muscle group necrosis, and (d) stress or fatigue fracture of the tibia."
3. "Primarily a tenosynovitis from irritation accompanied in its early stages by a sense of weakness and inability to dorsiflex the foot, and accompanied with crepitation which is palpable over the lower portion of the tibial tendon above the anterior ligament of the ankle. Unusual occurrence is in the anterior tibial compartment, primarily from overactivity."

These statements deal specifically with the problem of involvement, and point up the area of concern in regard to the treatment needed to return the athlete to functional operation.

One of the key symptoms pointed out in No. 3 is "inability to dorsiflex the foot." This not only indicates pain and weakness in the tibial muscle of the lower leg, but an excess tension in the posterior calf muscle group that prevents a pulling "foot up" action. (The significance of this action will be explained in greater detail in the discussion of the function of muscle strength and range of motion relationships.)

Looking into the matter from the standpoint of prevention and physical rehabilitation, it should be understood that individual evaluations account for variations in approach. Climatic conditions, track and floor conditions, and conditioning procedures have been influential in the trainer's thoughts and approach to the preventive aspects.

Similarly, physical rehabilitation approaches have varied according to the trainee's evaluation. The chief concern of all has been to get the athlete back into operation (without pain) for maximum physical and psychological function.

PREVENTIVE ASPECTS

The approach must deal with basic conditioning, taping and strapping, supportive devices, as well as the condition of the athlete's running surfaces.

The progressive conditioning of the foot and leg muscles has received considerable emphasis, and concern has been expressed over stretching and flexibility. An important point expressed by some trainers is teaching running with emphasis on pointing the toes straight ahead or slightly in ("pigeon-toed" running). This latter recommendation should produce better function as well as fewer stresses and strains.

In so far as the running surface is concerned, the ground should be soft or the track or floor resilient to relieve the shock of impact.

A point of interest in the preventive approach is the difference of opinion on the placement of sponge or padding in the shoes. Should it be placed under the heel or the ball of the foot?

One trainer contends that placing the pad under the ball of the foot constitutes both an effective treatment and a preventive—a technique undoubtedly based on sound concepts of the kinesiology or function of the ankle, which will cause a stretch action on the calf muscle group.

TREATMENT ASPECTS

Eighteen different treatment procedures emerged from a survey of trainers. The following were reported...
Fig. 1. Exercises for stretching the calf muscles (hold position for 10 seconds, then straighten arms).

Fig. 2. Anterior tibialis and arch exercise (pull up).

to have been the most frequently used (the numbers indicate their frequency of use):

Taping (18), arch (10), leg (9), moist heat (9), Whirlpool (9), Ultra sound (8), pad under heel (4), analgesic packs (4), and elastic wraps (4). Listed three times each were exercise, proper mechanics, and infrared heat.

Other techniques reported were: pad under ball of foot (2), massage (2), paraffin bath (1), ice packs (1), heat low back (1), and sponge along shin bone and taping (1).

In many cases, two or more of the procedures were utilized to afford relief and comfort to the athlete.

ANALYSIS OF THE PROBLEM BASED ON THE MECHANICS OF MUSCLE FUNCTION, RANGE OF MOTION (DORSAL-PLANTAR FLEXION) AND MUSCLE STRENGTH RELATIONSHIP

Under normal conditions, the ankle range of up-down motion has been specifically designated by Mosley as 15-20° for the toe-up action and 45-55° for the toe-down action. In these measurements, the subject has been able to voluntarily move his foot through the total range of motion without assistance. (The motion should be accomplished freely and easily.)

Measurement usually is taken with the subject sitting on a table, legs extended forward, foot at a right angle, with the leg and trunk supported by the hands.

The subject who's able to move his foot up and down through the required range of motion can be considered to have no muscle tensions and a normal flexibility relationship between the anterior tibialis and calf muscles.

If the subject is unable to voluntarily move his foot through the full range, a strength imbalance or tension exists. It’s very likely that voluntary toe-up movement will be restricted due to over-tightness of the calf muscle.

This excess tightness may well be created by the constant movement effort on the toes. Hence, when the muscle in front of the leg isn’t exercised specifically to maintain a strength balance with its antagonistic muscle (calf), the athlete may wind up with a tighter, shorter calf muscle.

Although this tightness of the calf won’t always develop, it’s more likely to do so where no specific effort is made to stretch this muscle group either systematically or otherwise during the training and activity season.

In other words, if the normal flexibility as well as strength relationships can be maintained through techniques, “shin splints” aren’t likely to develop. This balance will enable the anterior tibialis (front of leg) to have moments of relaxation during movement, thus taking constant stress off its attachment line.

Because the calf muscle group is one of the strongest in the body, running activities keep it under constant stress; it tends to strengthen and tighten relatively easily. The anterior tibialis (front of leg) only
has the responsibility of holding the toe up during forward motion and controlling the lowering movement of the foot once the heel is in contact with the floor.

EXERCISE PROGRAM

In this analysis, then, the logical answer would be the following:

1. Stretch the calf muscle through the proper exercise. (Fig. 1.)
2. Strengthen the anterior tibialis and arch muscles through specific exercise. (Fig. 2.)
3. Combine 1 and 2 to maintain the flexibility of the calf and strengthen the anterior-tibialis to maintain the strength relationships.

Fig. 1, stretching the calf muscle (stretching only to maintain normal voluntary toe-up movement):

1. Feet about hip-width apart, toes slightly “pigeon-toed,” weight on outer borders of feet.
2. Lean against wall as illustrated, with only a slight stretch on the calf muscle.
3. Lean forward by bending elbows just far enough to mildly increase the stretch of the calf muscle. This should be a comfortable stretch effort and not overdone. Overstretching may cause the muscle to react by tightening and cramping. Keep back straight.
4. Hold the stretch position for 10 seconds, then straighten the arms and relax for a few seconds. Repeat this stretching effort 10-12 times. The complete exercise period takes approximately two and a half minutes.

Fig. 2, strengthening the anterior tibialis muscles as well as supporter of the long arch of the foot. (Though there are more specific exercises for anterior tibialis strengthening, the one illustrated serves a dual purpose considered desirable for the program):

1. Feet slightly “pigeon-toed.” Keeping the great toe in contact with the ground, pull up on the inside of the arch as hard as possible and hold for 10 seconds.
2. Lower the arch for a few seconds and repeat the pulling-up process. Repeat the exercise 10 times for one exercise session. This exercise can also be done from a sitting position, as weight bearing isn’t essential to success. The effort becomes a concentrated isometric muscle contraction when the height of the pull is reached.

SUMMARY

These techniques aren’t new in the area of exercises, but in their application to this specific athletic problems. Fig. 1 has been used successfully as a preventive procedure, although a number of coaches have used similar stretching techniques without realizing they were preventing a potential problem!

“Shin splints” have never been a problem where specific stretching efforts have been applied. The stretching effort has proved successful with cases of “shin splints” that haven’t seemed to respond to other forms of treatment. It has also been used as a team exercise where numerous cases have existed within the squad.

It’s interesting to note that Lou Montgomery, track coach at Cornell, is using a modification of this program for this squad. Hal Bradley, Texas Basketball coach, also used this program last season. He states:

“We had absolutely no sign of shin splints. I gave the boys your stretching exercise against the wall the first day, and quite a few of them made it a daily part of their regimen throughout the season. Every time their legs felt a little drawn and tight, they’d do the exercises.”

Most of the basketball players at Eastern Washington also did the exercises the past season. Only one case of shin splints was reported; that occurred early in the season to a new boy coming in late. The “stretcher” completely eliminated the problem, and there was no recurrence. The boy went on to become one of our best rebounders.

SHIN SPLINTS: DRAKE

on the weight machine and, to develop the muscles in the arch of the foot, we have them pull a towel with the toes with weights on the end of the towel. We have also had very good success with taping the arches. If shin splints is reported to us in the first two or three days, taping the arches usually will eliminate the pain in a short time. We also change the work out field if possible. Track athletes are told to work out on the grass. To prevent shin splints in football, soccer, rugby, etc., watering the field to soften the turf is a standard procedure.

6 There were several different methods of taping. In our survey we found eight who tape the arch, ten who tape at the point of pain, seven who tape the anterior tibialis against the tibia. There were a small number who use different taping methods.

7 The athletes’ problems were felt by some to persist until a rest period. Others felt that complaints went away with exercise. Obviously the nature of the condition as well as its severity are important considerations. Specificity of what one calls shin splints would be of distinct help.

In summing up this painful and annoying injury, we find that time away from practice or competition depends primarily upon the athlete. If he can endure the pain, this injury should not keep him out of competition. Very few are severe enough to keep a boy out for the season. It is, however, bound to interfere with his best possible effort; and in today’s dedicated competition, our best is none too good.
Know Your Directors

FREDERICK R. MASSMAN—District 1  
*Boston College, Chestnut Hill, Mass.*

Frederick R. "Fritz" Massman is currently the head trainer at Boston College. He has been serving in this capacity with the Eagles since July, 1966. Massman is a native of New Rochelle, New York, and graduated from New Rochelle schools and Iona Prep. He served in the Navy from 1946-49, and after discharge attended the Gus Mauch School for Trainers.

He returned to Iona Prep to serve as the school’s first athletic trainer, and later moved up to Iona College as head trainer. He then accepted a position with Columbia University as assistant trainer, and two years later went to Brown University in the same capacity. In 1964, Massman succeeded Joe Romo as Brown’s head trainer, a position he held until accepting the BC appointment.

JIM I. PRICE—District 3  
*University of South Carolina, Columbia, South Carolina*

Jim Price received his training under Frank Medina at the University of Texas coming to South Carolina in March 1959. Prior to that, he had served as trainer for Lon Morris College in Jacksonville, Texas and in high school in his home town of Jefferson, Texas.

Price has been selected to serve as an assistant trainer for the U.S. Olympic Team in the Pan American Games to be held in Winnipeg, Canada, July 22 to August 7, 1967. Jim has served as secretary-treasurer of District 3 before being elevated to the current position as District Director.

EDDIE SULKOWSKI—District 2  
*Penn State University, University Park, Pennsylvania*

During his high school days in Pittsburgh, Pennsylvania, Eddie played football, baseball and was an amateur boxer. In 1940 he won the National Jr. A.A.U. featherweight championship.

After a hitch with the armed forces during World War II, Eddie re-entered Penn State where he received his B.S. degree in 1949. In June 1954 he was awarded a Master’s degree in Education.

Eddie has just finished his 19th year at Penn State. He started his career in athletic training under Chuck Medlar at Penn State in 1948. He then joined Chuck’s staff in 1949. In 1954 and again in 1963, Eddie conducted boxing clinics for the armed forces throughout the South Pacific. He now works with all sports and travels with the football and wrestling teams.

MILLARD KELLEY—District 4  
*Detroit Lions Football Club, Detroit, Michigan*

While attending Purdue University in pursuit of a B.S. degree (1952) Millard was Student trainer for three years. Upon graduation he attended Stanford University and received his certificate in Physical Therapy. While at Stanford he assisted Conrad Jarvis in the training department. In 1954 (Spring) Millard was Head Trainer at the University of Pacific. From 1954-55 he moved to Michigan State University where he was assistant trainer. He has been the Head Athletic Trainer of the Detroit Lions of the NFL from 1955 until the present time.
C. Ray Bickerstaff—District 5  
Iowa State University, Ames, Iowa  
C. Ray Bickerstaff was both a high school and college athlete. He graduated from the University of Arkansas (B.S.E. 1951), and received his Masters Degree from the University of Texas. It was during the two years at Texas and with Frank Medina that his training career began. He was Head Trainer and Assistant Football Coach at Arkansas State College, Jonesboro from 1953-1954. He then moved to New Mexico State University, Las Cruces, in June 1955 where he served as Head Trainer and assistant in football and basketball, as well as Head track coach. He next moved to Iowa State University in Ames in 1961 where he is serving as Head Trainer and part time recruiter.

Robert Beeten—District 7  
Idaho State University, Pocatello, Idaho  
Bob Beeten received his training under Jim Stults at Colorado State University before coming to Idaho State in 1960. Prior to that he served as trainer for the El Paso, Texas public schools; at Bowie and Irvin high schools in Texas.  
Bob recently received his Masters degree from BYU. In the summer of 1964 he traveled to the Far East for the State Department as trainer for boxing clinic lectures. Bob also works as assistant track coach at Idaho. He is presently on the board of directors and the Bike Foundation. Bob is married and has a daughter eight years old.

Earl (Bubba) Porche—District 9  
Tulane University, New Orleans, Louisiana  
Earl (Bubba) Porche, a native Texan, heads Tulane's training room staff and is regarded as one of the nation's best athletic trainers. The Marshall, Tex., product played football and baseball in high school and came to Tulane from the Navy in 1946 as assistant trainer and student. He was graduated from Tulane in 1949, completing study for his degree in only three years, and was named head trainer two weeks later. Porche has served as trainer at Blue-Gray games for the past several seasons. He and his wife, Norma, have two sons.

Robert H. Gunn—District 6  
Lamar State College of Technology, Beaumont, Texas  
Bobby Gunn gained a lot of experience working with Eddie Wojecik at Rice Institute before his graduation in 1951. He spent the next six years as trainer for the Brazosport School District in Freeport, Texas, and then served in the same capacity with the Baytown School District for three years. After a two-year "vacation" in the life insurance business he came back to training as head trainer at Lamar Tech in 1962. Twice Bobby has gone out of the country as trainer with U.S. teams—to the Pan American Games in 1959 and to Mexico City with our soccer team for the Olympic elimination games last year. He will be head trainer for the 1967 Pan Am Games to be held in Canada.

William H. Chambers—District 8  
Fullerton Junior College, Fullerton, California  
Bill Chambers is currently athletic trainer at Fullerton Jr. College, Fullerton, California. He was trainer for the 1965 Junior Rose Bowl and National Junior College Football Champions, program speaker at the 1963 NATA convention at Palo Alto, California, and co-organizer for the Southern Section NATA District 8. He was also trainer for the Shrine All-American Basketball game in 1961 and 1962, and Assistant Trainer at the University of Missouri for three years. He attended the University of Oklahoma and worked under Olympic Trainer Ken Rawlinson; he received his B.S. degree in Physical Education.

Merton E. Prophet—District 10  
Toronto Argonaut Football Club, Toronto, Ontario  
Merton Edward (Mert) Prophet, the 43-year old trainer and equipment manager of the Toronto Argonaut Football Club is also the founder and president of the Canadian Athletic Trainers Association. Mert's career as a trainer began at Indianapolis in 1951 while he was also spare goalie. He became head trainer of Indianapolis Indians of the American Association (baseball) in 1952 and was with that team in 1956 when it won the league pennant and junior world series. He moved to Butler University as head trainer following the 1956 baseball season and was there until joining Argonauts in 1964.
...you want the new Bike School Pack. This lightweight, portable carrying case is the biggest improvement in tape packaging to date. It can be carried any place—one handed—thanks to an exclusive built-in handle. It opens easily and the entire contents lift out leaving a one-piece carrying tray for quick dispensing of all the tape you need. The new Bike School Pack is all ready to go. And it's the most economical way to buy tape. The tape itself? It's made to give you an easy, consistent unwind. So try the new Bike School Pack tape. Try Bike for all your training room supplies.
Citation for Trainer

Specialist Four, E-4, Leonard W. Myers, United States Army, United States Military Academy, West Point, New York, distinguished himself on the morning of Saturday, October 8, 1966. The Army soccer team played a game against the University of Notre Dame soccer club at South Bend, Indiana. During the third quarter of the game, an Army player accidentally collided with a Notre Dame halfback as both players were going for the ball. Both men were knocked down by the impact. The Army player got up and continued play, but the Notre Dame player, Mr. Fred Rohol, did not arise.

Realizing that Notre Dame had no trainer or doctor in attendance at the game, Specialist Four Leonard Myers, trainer for the Army team, rushed out on the field to offer his assistance as soon as play had been stopped. By the time Specialist Myers reached Mr. Rohol, the Notre Dame student was unconscious and no longer breathing. Myers, immediately perceiving that Rohol had swallowed his tongue and was suffocating, quickly took charge of the situation. (At the hospital, it was later determined that Mr. Rohol had suffered a concussion in the collision).

Specialist Myers called for the Army soccer coach, Mr. Joseph M. Palone, to assist him. Mr. Palone ran to the scene of the accident, and grasping Mr. Rohol’s upper and lower jaws, managed to separate his jaws far enough to permit Myers to reach for and grasp the tongue. Within a very few seconds, working carefully but quickly, Myers had pulled the tongue free, and Mr. Rohol gasped his first breath of air in over two minutes. By this time, Rohol was black in the face and was close to death.

Specialist Myers with the help of Coach Palone was able to revive Mr. Rohol and bring him to the point where he could safely be transported to the hospital in the campus ambulance. Specialist Myers displayed a high degree of professional knowledge and skill in rendering first aid to Mr. Rohol. His prompt and decisive action saved the life of the Notre Dame player.

Trainer’s Seminar in Mexico City

The first Trainer’s Seminar to be held in Mexico was conducted by Bill Easton (second from left), head track coach for the Mexican Olympic Team. Speakers included Dr. Charles A. Roberts, (left), Austin, Texas, podiatrist; Mr. Easton; Jim Cody, manager of the Tru-lab athletic pharmaceutical division of Truett Laboratories; Dr. Sergio Savvedra, member of the Olympic Sports Medical Center; and Conrad Jarvis, athletic trainer and physical therapist for Mexico.

An eager and interested group of Mexican athletes who attended the First Trainer’s Seminar held in Mexico. The Seminar was conducted at the Olympic Sports Center, site of the 1968 Olympic Games.
ATHLETIC PHARMACEUTICALS
for the professionals
...from the professionals

TRU-LAB PRODUCTS
a complete line of pharmaceutical-quality products for coaches and trainers, developed by a company with over fifty years' experience in drug research and manufacturing

ATHLETIC ADVISORY STAFF

Bobby Brown, Head Trainer, Houston Oilers
Delmer Brown, Track Coach & Head Trainer, East Texas State University
Don Cochran, Trainer, Dallas Cowboys
Larry Gardner, Trainer, Dallas Cowboys
Roger McGill, Head Trainer, Pittsburgh Steelers

TRUETT LABORATORIES / DALLAS, TEXAS
Athletic Pharmaceutical Division
Keep your players in the line-up
Physical therapy at its best, for your specific treatment requirements

Ille Trainers-Aid Mobile Whirlpool Bath (Model THM-100)
Tops in effectiveness; four tank sizes, welded, leak-proof; easily filled, easily drained. Stationary units available.

Ille "Constantemp" Paraffin Bath (Model PB-112)
For higher heat application, safely thermostatically controlled; leakproof, stainless steel tank.

Ille Portable Hydro-Aid (Model TPH-110)
Powerful ejector-aerator unit makes any tub a whirlpool bath. Weighs only 31 lbs.

Write for details.
ILLE ELECTRIC CORPORATION • Reach Road, Williamsport, Pa. 17701

EFFECTIVE MOIST HEAT EASILY APPLIED

STEAM PACK
U.S. Pat. No. 2,710,008
Master Units automatically maintain Steam Packs in water at proper temperature — constantly ready for immediate use. No plumbing required. Console Models available for 8 and 12 packs; Table Models for 2, 4, and 8 packs.

MODEL E-1
4 PACK

At least 30 minutes of effective MOIST HEAT with each application. Hundreds of treatments from each Steam Pack.

Use on Neck, Shoulders, Back or Extremities
- Several players may be treated at the same time.
- No special technique or training needed.
- Moist heat with all of its advantages.
- Convenient, simple, safe, effective.
- Low cost investment
  (Complete units—$39.50 and up).

CHATTANOOGA PHARMACAL CO., INC.
2400 DAYTON BLVD., CHATTANOOGA 5, TENN.

Send for literature and prices

Calendar of Coming Events

March 7-10—American College of Sports Medicine (Fourteenth annual meeting), Hotel Tropicana, Las Vegas, Nevada. Info.: Allan J. Ryan, M.D., 1300 University Avenue, Madison, Wisc. 53706.


March 28-31—American College Health Association, Mayflower Hotel, Washington D.C. Info.: Lee D. Stauf-fer, Exec. Secy., P.O. Box 9117, University of Miami Branch, Coral Ga-bles, Fla. 33124.

In Memoriam

We have just been informed that Langdon Moss, M.D., team physician at the University of Virginia passed away on June 15th this past year. Dr. Moss was born May 24, 1916, in Richmond, Virginia. He received his B.S. degree from the University of Richmond in 1937, and his M.D. from the University of Virginia in 1943. He served the University of Virginia as team physician since 1955. A memorial scholarship has been established in his name.

New book on Knee Growth

Knees—Growth and Development and Activity Influence by Karl K. Klein is the first major work ever completed to illustrate the growth and development trends of the ligament structures of the knee joint throughout the life span of the male and female populations. Mr. Klein is an Associate Professor of Physical Education at the University of Texas. The book is available from: All American Productions and Publications, P O Box 91, Greeley, Colo. 80631—$4.50 per copy.
Your Skillful Hands...

can make the difference between top-performance and half-speed...a sound athlete, or one on the bench...a successful season, or one to forget.

The right products in your hands, can help you make the difference. Johnson & Johnson Athletic Tapes, and other training room supplies, are the result of over 75 years of research and manufacturing experience. They give you important features not available in other brands.

Johnson & Johnson
DON’T PLAY GAMES WITH JOCK ITCH OR ATHLETE’S FOOT.

Tack this up after you send in your order.

<table>
<thead>
<tr>
<th>NO. CASES</th>
<th>COST</th>
<th>SEND ORDER AND INVOICE TO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DESENEX® AEROSOL</strong></td>
<td></td>
<td>Name____________________</td>
</tr>
<tr>
<td>3 oz. player size</td>
<td></td>
<td>Address__________________</td>
</tr>
<tr>
<td>24 per case—$18.60</td>
<td></td>
<td>City____________ State____ Zip________</td>
</tr>
<tr>
<td>12 oz. team size</td>
<td></td>
<td>Direct Order □ Or local dealer □</td>
</tr>
<tr>
<td>6 per case—$12.39</td>
<td></td>
<td>Dealer Name________________</td>
</tr>
<tr>
<td><strong>CRUEX™ AEROSOL</strong></td>
<td></td>
<td>Dealer Address____________</td>
</tr>
<tr>
<td>3 oz. player size</td>
<td></td>
<td>City____________ State____ Zip________</td>
</tr>
<tr>
<td>24 per case—$23.52</td>
<td></td>
<td>Direct Order □ Or local dealer □</td>
</tr>
<tr>
<td>12 oz. team size</td>
<td></td>
<td>Dealer Name________________</td>
</tr>
<tr>
<td>6 per case—$16.14</td>
<td></td>
<td>Dealer Address____________</td>
</tr>
<tr>
<td><strong>DESENEX SOAP</strong></td>
<td></td>
<td>City____________ State____ Zip________</td>
</tr>
<tr>
<td>3.25 oz. cake</td>
<td></td>
<td>Direct Order □ Or local dealer □</td>
</tr>
<tr>
<td>72 per case—$11.80</td>
<td></td>
<td>Dealer Name________________</td>
</tr>
<tr>
<td><strong>DESENEX OINTMENT</strong></td>
<td></td>
<td>Dealer Address____________</td>
</tr>
<tr>
<td>4 gm. tube</td>
<td></td>
<td>City____________ State____ Zip________</td>
</tr>
<tr>
<td>6 per case—$2.36</td>
<td></td>
<td>Direct Order □ Or local dealer □</td>
</tr>
<tr>
<td>4 gm. tube</td>
<td></td>
<td>Dealer Name________________</td>
</tr>
<tr>
<td>144 per case—$29.40</td>
<td></td>
<td>Dealer Address____________</td>
</tr>
<tr>
<td><strong>DESENEX POWDER</strong></td>
<td></td>
<td>City____________ State____ Zip________</td>
</tr>
<tr>
<td>.25 oz. can</td>
<td></td>
<td>Direct Order □ Or local dealer □</td>
</tr>
<tr>
<td>144 per case—$29.40</td>
<td></td>
<td>Dealer Name________________</td>
</tr>
<tr>
<td><strong>CALDESENE® POWDER</strong></td>
<td></td>
<td>Dealer Address____________</td>
</tr>
<tr>
<td>5.25 oz. can</td>
<td></td>
<td>City____________ State____ Zip________</td>
</tr>
<tr>
<td>12 per case—$17.00</td>
<td></td>
<td>Direct Order □ Or local dealer □</td>
</tr>
<tr>
<td><strong>DISCOUNT SCHEDULE</strong></td>
<td></td>
<td>Dealer Name________________</td>
</tr>
<tr>
<td>5% on orders from $50.00-$100.00</td>
<td></td>
<td>Dealer Address____________</td>
</tr>
<tr>
<td>10% on orders from $100.00-$150.00</td>
<td></td>
<td>City____________ State____ Zip________</td>
</tr>
<tr>
<td>15% on orders over $150.00</td>
<td></td>
<td>Direct Order □ Or local dealer □</td>
</tr>
<tr>
<td><strong>Purchaser’s Signature</strong></td>
<td></td>
<td>Dealer Name________________</td>
</tr>
</tbody>
</table>

Prices are subject to change without notice and applicable to shipments in U.S. and possessions. Terms: 2% 30 days, net 31 days. 2% applicable against net billing. FREIGHT: prepaid on all shipments of $50.00 or more. Returns: merchandise is non-returnable except as noted on packing slip. Taxes: we hold certificate of authority to collect sales or use tax. Certificate of exemption must be filed with Desenex Athletic Division in order to preclude tax deduction. Invoicing procedure: if documentation other than our standard invoice is required to insure payment, kindly include such forms at the time your order is submitted.

Desenex Athletic Division • Wallace & Tiernan Inc., P.O. Box 583, Rochester, N.Y. 14603