

# HAND SURGERY

Q U A R T E R L Y



## ANNUAL MEETING 2003

### Paradise Found, Paradise Lost, Paradise Regained

**The AAHS 33rd Annual Meeting, Kauai, Hawaii, January 8-11, 2003**

In 1999, the American Association for Hand Surgery gambled that the membership would support its 29th Annual Meeting in Kona on the "Big Island" of Hawaii. The distance was far for members and guests. The expense was more than for the average meeting. Commercial exhibitors had more than the usual challenges shipping their wares. We held our breaths.

The meeting was a resounding success. The program was terrific. Everyone loved the site. The traffic for the commercial exhibitors located in the lanai in front of the lecture halls was perfect. Fellowship abounded. Paradise was found. The meeting ended. Paradise was lost, but the hue and cry was for a repeat performance.

Once again, this year, the trips to and from Kauai were long, arduous, and tiring, but the



**Arnold-Peter Weiss, MD provided a break from a morning of scientific sessions with his lecture on ancient Greek coinage.**

rewards were bountiful. All aspects of the meeting were excellent. Some friendships were renewed and strengthened, others initiated. Three hundred forty-one registrants participated. Hand surgeons from all over the United States and the world attended. Past AAHS presidents Kim Lie ('75-'76), Lin Puckett ('88-'89), Wyndell Merritt ('90-'91), Bob Beckenbaugh ('93-'95), Bob Russell ('97-'98), Peter Amadio ('98-'99), Bill Swartz ('99-'00), and Bob Buchanan ('01-'02) and their spouses or significant



**Left to right, Immediate Past President Alan Freeland, MD with Hand Therapy Program Co-Chair Lynn Bassini, CHT and AAHS Humanitarian of the Year Mukund Patel, MD.**

others attended. Jim Hoehn ('83-'84) and Bob DeMuth ('89-'90) sent written messages of encouragement. Bob Schenck, founder and first president of the Hand Surgery Endowment and his wife, Marcie Whitman Schenck,

graced the entire meeting. Paradise was regained.

The meeting got off to a great start with "Therapy Day" organized by Lynn Bassini and Lee Osterman. "Care of the Hand, Wrist, and Upper Extremity in the Injured Athlete" informed us not only of the special needs of participants at all levels of play, but also provided information applicable to countless others. Seventy-five free papers, 10 Resident and Fellows papers, 18 Instructions Courses and 3

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## Legacy of Heroes

As many of you probably know, I recently finished a term as chair of the Council of Musculoskeletal Specialty Societies, or COMSS, a constituent council of the American Academy of Orthopaedic Surgeons (AAOS), which represents the interests of orthopaedic specialists within AAOS. I am proud to have served in this capacity as AAHS's representative.

One of the privileges of serving as Council chair is a seat on the AAOS Board of Directors. Each year the Board sponsors one or more projects designed to serve a larger community. This year, the project selected was 'A Legacy of Heroes', a memoir of AAOS members who served in World War II. I mention this for several reasons. First, the exhibit is excellent history, and it, and its accompanying film, "Wounded in Action" are available to travel. They are currently featured at the D-Day museum in New Orleans, but a road trip is planned, and if you are interested in having the exhibit featured in a museum in your community, you can let me know via the AAHS office, and I would be happy to see what can be arranged. Second, of course, the graphic nature of the wartime film footage is a poignant and timely reminder of the horrors of war. By the time you read this, the United States may once again find itself fighting on freedom's ramparts, which means also once again creating a laboratory for surgical innovation, which has been war's gift as well as its curse since our profession was born so many millennia ago.



PETER C. AMADIO, MD

The war, the exhibit, and the film have another value, however, to us as hand surgeons. For, just as World War I in many ways saw the birth of our parent disciplines of plastic and orthopaedic surgery as specialties, it was World War II that gave birth to our own specialty of hand surgery.

That this occurred was in some degree fortuitous, because the Surgeon General of the Army at the time, Norman Kirk, just happened to be a friend of Sterling Bunnell. Times were different then. Without benefit of retirement plan or even, apparently, steady pay from the Army, in the fall of 1944 Bunnell closed his office in San Francisco, and spent the next two years as a special civilian consultant to the Secretary of War, establishing regional centers for the treatment of hand injuries in the returning GI's, and teaching the young surgeons there how to be something that had never been before: a hand surgeon. The first center was set up at Cushing Hospital, near Boston. The first trainee: Captain James William Littler.

Between November 1944 and February 1947, Bunnell made the rounds of the 10 military hand centers that were ultimately established across the country. At each location, he lectured, saw patients and operated for three or four days, and then moved on, returning a few months later to educate a new crop of young surgeons. By the time he was done, his students had treated tens of thousands of wounded soldiers, and a specialty was born. Even before that, the world's first hand society was organized; the American Society for Surgery of the Hand held its first meeting, and elected Bunnell as its first President, in January 1946.

Hand surgery has come a long way since then. A companion specialty, hand therapy, has also developed, in part as a consequence of

the pioneering work of another hand surgeon, James Hunter, and a physical therapist, Evelyn Mackin, working together to rehabilitate soldiers injured in another war, this time in Vietnam. Today, AAHS embodies both dimensions of hand care, the first and still the only organization in the world to include both surgeons and therapists as members, and the only one to insist that both surgeons and therapists share the podium, as equals, at every meeting.

Now, as we stand on the brink of perhaps another war, it is fitting that we reflect on the roots of our profession, look back on the dwindling ranks of the heroes that made what we do possible, and give them thanks. And, with that thanks, resolve to move the art and science of hand surgery forward, so that future generations can someday say that our generation, too, had its heroes. 

### HAND SURGERY QUARTERLY

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# Leadership, Commitment Characterize Members

**L**eadership, commitment, service excellence and enthusiasm are words that characterize the American Association for Hand Surgery members. I'd like to mention some of them so we can all say thank you to their efforts. All of us thank Dr. Alan Freeland for his leadership efforts to further the organization. Thank you to the other organization that join the annual meeting and foster cooperation with AAHS: the American Society of Hand Therapists (President Chris Blake), American Society of Reconstructive Microsurgery (President Ron Zuker), and the American Society Peripheral Nerves (President Keith Brandt) during his presidential year.

Another AAHS leader is Dr. Miguel Saldana. He is President of the Hand Foundation. Obtaining contributions is a difficult task during an economic slow down. However using his talents and hard work, contributions to the Foundation have increased and continue to provide funds for special needs, projects, and rewards. Read for his current report on page 5 of this issue.

Paul LaStayo has organized an exciting project that represents the heart and spirit of AAHS. This year's Vargas Award recipient will spend time in Chinle Arizona on the Navajo Reservation teaching and training at the Comprehensive Health Care Facility located in Chinle. It would be a demonstra-

tion of AAHS esprit de corps and concern for others to provide teaching and service at this facility on an annual basis. Dr. Brian Adams and Dr. Lee Osterman have committed to working for a week each this year. But Paul's vision is that we make this an annual event using AAHS's excellent membership to help with the ongoing task of serving the needs of this facility on an ongoing annual basis. The project will require some financial funding but will mostly require contributions of your surgical skill for one week each year!

The AAHS has always strived for high quality education with global impact for those that attend our annual meeting but also for the patients that trust us with their health care needs. Nowhere is that more evident than on the AAHS website [HandSurgery.org](http://HandSurgery.org). An increasing awareness of informational sources and accuracy are giving professional organizations' web sites greater prestige and authority. It is also true that websites must change, evolve, and develop new



**Dr. Van Beek with Chris Blake, OTR, CHT, President of the American Society of Hand Therapists at the Annual Meeting.**

methods of web-based education if a professional organization is to remain strategically involved with member and public education. This year I'm asking that our members become web savvy and broadband capable. The sooner we can complete that task, the easier it will be to maintain educational demands

that are required by certification organizations other than the all too familiar recertification examination.

What is broadband Internet access and what is its relationship to education is probably echoing in your mind. Broadband access to the Internet is the same as the Internet access most of you already have. Your computer is connected to the Internet via a modem that can transmit data at 58,000 (58K) bits of data per second on a really good day. Most of the time it's more like 8K per second. Broadband Internet access is usually available via T-1 lines in apartment buildings and office buildings. Cable modem, IDSN, DSL, Satnet are methods of obtaining broadband access in your house. Why bother? Broadband Internet access for your computer permits real time transmission of sound, still images and high quality video images. That capability will permit new strategies in continuing education and maintenance of certification not previously possible.

I have read the many complaints about the recertification exam and if one is to change the decade testing and review requirements, an alternative strategy is required. The first step in the strategy is to have the majority of members obtain broadband access. A crucial second step is to have educators begin an online, planned and comprehensive education for our members and for the members to participate in the plan. It might be called E-Ed for electronic education or internet-based education I-Ed. Online, at home, available when you are available and for Category One credits and without the attached hotel and airline fares. The final stage of the strategy would be documentation of educational breath combined with clinical outcomes as advocated by the TOPS program of



**ALLEN VAN BEEK, MD**

*continued on page 4*

## Call for Nominations AAHS

The American Association for Hand Surgery is seeking nominations for The Board of Directors for 2004. Nominations for the following positions:

Vice-President  
Secretary  
Treasurer-Elect  
Historian  
Board of Directors (at large) 2  
Junior Affiliate Hand Therapist

Nominations should be sent, prior to April 15, 2003, to:

Alan E. Freeland, MD  
Department of Orthopedic Surgery and Rehabilitation  
University of Mississippi  
Medical Center  
2500 North State Street  
Jackson, MS 39216  
Fax: (601) 815-1223  
E-mail: [afreeland@orthopedics.umsmed.edu](mailto:afreeland@orthopedics.umsmed.edu)

Criteria for nomination should include but is not limited to:

- Evidence of past service to AAHS
- Past participation and productivity in AAHS events and ventures
- Knowledge of AAHS mission
- Commitment to continued support and service to the AAHS
- Respect of peers
- Leadership skills
- Ability to work collegially with others and to meet deadlines
- Available time and energy
- Knowledge of AAHS mission, vision, and values
- Evidence of skills as a "team player"
- Special skills: financial, accounting, fundraising, membership solicitation, governance skills, meeting organizational skills, etc.
- Past awards, recognition 

## FROM THE PRESIDENT

*continued from page 3*

the Plastic Surgery Education Foundation and the American Society of Plastic Surgery. With this strategy implemented and documented, it is likely the American Board of Medical Specialties would realize that the cost and imperfections of the now required "decade test" was superseded.

Personally, as I reflect on what the future of what member education looks like, I'm grateful we can't shop, hike, sun on the beach, golf, or play tennis with our friends on the internet! We will still need our annual meeting with our friends and colleagues to discuss problem cases and compare techniques: a recent visit to Palm Springs, California, renewed my excitement for next year's meeting. The Westin staff invites us for an exciting week with venues to satisfy everyone's interests.

Mark your PDAs to reserve Jan 14-17, 2004 for the AAHS Annual Meeting in Palm Springs, California's Westin Mission Hills Resort. Dr. Warren Schubert, the 2004 Program Chairperson, assisted by Dr. George Landis, has

already formulated exciting educational and relaxation venues. Expect an excellent educational program with some new twists! Shopping is excellent; the golf course and tennis courts are professional quality, and the weather is almost always sunny and warm in January.

The American Association for Hand Surgery is a non-exclusive, global organization disseminating education and information about hand surgery to its members and the people they care for. Join our organization and experience the friendships that develop when recreation and education are combined every year at our annual meeting. 

### Stepping Up

*Dr. Stiles Jewett, Jr., associate editor for the HSQ's Coding Corner, has been called to active duty and will be taking a leave of absence. We thank Dr. Jewett for donating his time and expertise, and wish him a safe tour and swift return to his family and practice. In the interim, Leon S. Benson, MD has graciously volunteered to take up the coding edification challenge (page 12), for which we are most grateful.*

The American Association for Hand Surgery would like to thank the following sponsors:

**KMI**

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Joint Reception Sponsorship

**Carl Zeiss**

Break Sponsorship

# Mission Continues on a Steady Course

**A** most tranquil and beautiful setting harbored the very well attended, well organized, rich in material and subject matter 33rd AAHS Annual Meeting at the Hyatt resort in Kauai, Hawaii. I would like to report that your Endowment, despite the last two most difficult economic years, is currently holding on to the one quarter of a million dollars. A year ago, the Endowment Board of Governors

## 2003 AWARD WINNERS

### Research Grant Awards (\$3,300 each)

#### Michelle Tucci, PhD

*The Role of Proteoglycans in Idiopathic Carpal Tunnel Syndrome*

#### Michael Nonkov, MD

*The Effects of FK506 and Cyclosporine A on Nerve Regeneration and Functional Recovery in a Rat End-to-Side Model*

#### Andrew Zhang, MD

*Gene Expression Analysis of Dupuytren's Disease*

### Best Resident/Fellow Scientific Paper (\$500)

#### Paul Grutter, MD

*The Accuracy of Distal Posterior Interosseous and Anterior Interosseous Nerve Injection: A Tool for Pre-Operative Outcome Assessment for Wrist Denervation*

### Best Poster (\$200)

#### Miguel Pirela-Cruz, MD, Vincent Battista, MD, Ennis Kanlic, MD

*Posterior Subluxing Approach to the Elbow*

### Best Therapist Paper (\$500)

#### Susan Michlovitz, PT, PhD, CHT

*Continuous Low Level Heat Therapy for Wrist Pain*

decided to enlist a professional management team at SalomonSmithBarney to preserve capital and grow the Endowment to its one million dollar goal. We still need your help and avid cooperation to reach this very attainable goal.

At this 33rd AAHS Annual Meeting, the Endowment gave the recipients of the Vargas Hand Therapy International Teaching Award, Susan Michlovitz PhD, PT, CHT and Paul Brach PT, MS, CHT, \$1000 for their trip to the Chinle Indian Health Service Hospital in Chinle, Arizona later on in the year. Dr. Brian Adams will accompany Mr. Brach and Dr. Lee Osterman will accompany Dr. Michlovitz.

Congratulations to all the award winners (see box at right). Dr. Pirela-Cruz promptly donated the \$200 Best Poster Award back to the Endowment. I thank you for this very generous gesture.

As the net value of the Endowment grows it will be able to support many more of the annual awards including awards to the 2nd Best Resident/Fellow Scientific Paper, 2nd Best Paper for the Therapists, and Best International Paper. It will also cover the President's invited guest speaker Honorarium. As the money in the Endowment grows and reaches the \$1,000,000 goal, even the registration to the annual meeting could be substantially reduced, if not eliminated. All this can

only happen through your generous contributions. The best time to contribute is at the time of registration when you can allocate \$150 towards the Endowment.

In the year 2000, 68% of you contributed to the Endowment. In 2001 the contributions dropped to 38%. Last year only 13% of the membership saw the Endowment as a worthwhile entity. This is your Endowment. If half of the membership gave \$500, the Endowment would be at half a million dollars and half way to reach its goal!

I urge you to consider a contribution. Please make the checks out to the Hand Surgery Endowment and address it attention to either:

Ms. Reneta Webb, PhD, CA  
Administrator, Hand  
Surgery Endowment  
6222 South Major Avenue  
Chicago, Illinois 60638

or  
Miguel J. Saldana, MD  
President, Hand Surgery  
Endowment  
2623 Country Hollow  
San Antonio, Texas 78209

If you need to know more about the Endowment, the contacts are the above two people.

The Board of Governors of the Endowment acknowledges Dr. William Dzierzynski, MD, Chair of the Residents/Fellows Committee for all the work he did in selecting the Best Resident/Fellow Paper, the Best Therapist Paper, and the Best Poster Awards.

The Board of Governors of the Endowment, Miguel J. Saldana, MD, Joseph Danyo, MD, Brad Meland, MD, William Swartz, MD, Robert Walton, MD, and Alan Freeland, MD would personally like to thank immediate past president Dr. Alan Freeland and the 2002 AAHS Board for the generous \$3000 gift to the Endowment. It sets a very good example and a good precedent for 2003! **H**



**MIGUEL SALDANA, MD**



## AAHS 2003 Officers and Board

- President  
**Allen Van Beek, MD**
- President-Elect  
**Richard Berger, MD, PhD**
- Vice President  
**Susan Mackinnon, MD**
- Treasurer  
**N. Bradley Meland, MD**
- Secretary  
**Ronald Palmer, MD**
- Historian  
**A. Lee Osterman, MD**
- Parliamentarian  
**Richard Brown, MD**
- Directors At Large  
**Brian Adams, MD**  
**Carolyn Kerrigan, MD**  
**Scott Kozin, MD**  
**Sheila Lindley, MD**
- Affiliate Directors  
**Lynn Bassini, MA, OTR, CHT**  
**Paul Brach, MS, PT, CHT**  
**Gail Groth, OTR/L, CHT, MHS**

## RECOGNITION AWARDS

### Clinician/Teacher of the Year Award Winners

**Warren Briedenbach, MD**  
*Physician of the Year*

**Richard Brown, MD**  
*Physician of the Year*

**Alexandru Georgescu, MD**  
*International Physician of the Year*

**Susan Michlovitz, PT, PhD, CHT**  
*Therapist of the Year*

**Humanitarian of the Year**  
**Mukund Patel, MD**

### 2003 Vargas Hand Therapy International Teaching Award

**Paul Brach, PT, CHT**  
**Susan Michlovitz, PT, PhD, CHT**

## 2003 ANNUAL MEETING

*continued from page 1*

Symposia covered the cutting edge of new developments in our specialty. The abstracts of all of the papers were published in a Special Supplement of the December issue of "Orthopedics." The AAHS, ASRM, and ASPN Joint Symposium on "Reconstruction of the Severely Mutilated Upper Extremity" was a meeting highlight. Our Presidential Guest Speaker, Art Rettig, Keynote Speaker, Peter Weiss, and International Guest Speaker, Tony DeSantolo added a special relevance to the occasion. Harrison Ford and Calista Flockhart indulged our star-struck awe. Awards were given for the Best Resident/Fellow Paper, the Best Therapist Presentation, the Best Poster, Clinician-Teacher of the Year (Physician, Therapist, and International Physician), and Humanitarian of the Year.

The weather was perfect. The majestic mountains, multicolored canyons, sand covered beaches,

rhythmic oceans, sounding whales, and botanical beauty of the island promoted exercise, recreation, exploration, and discovery. Evening receptions and dinners with exceptional cuisine tingled our taste buds and allowed warm conversation. Luaus gave us a glimpse into the Polynesian history, culture, and crafts. Pina colodas and other exotic beverages beckoned at the Stevenson Library "after hours." Plans were made for the future. The meeting served as a fountain for new ideas and "next steps." We advanced the transcontinental "Brotherhood and Sisterhood of Hand Surgeons."

Thanks to all who attended, participated, presented, and organized this spectacular meeting. Special thanks to Laura Downes Leeper, CAE and the Central Office Staff, who worked diligently throughout the year to assure the success of this wonderful event.

Next year, when we reconvene in Palm Desert, paradise will be regained again for paradise is always found in the renewal and institution of the bonds of friend-



**International Speaker Anthony DeSantolo, MD gave a presentation on the history of hand surgery in Venezuela.**



**The course was idyllic for the 7th Annual Golf Tournament.**



**Smiling islanders handing out leis made everyone feel welcome.**

ship, the exchange of knowledge, and humanitarian service. Beautiful sites are a wonderful catalyst. May 1 will be the deadline for abstracts. Plan now to attend and participate.

Alan E. Freeland, MD  
*Immediate Past President*

William B. Geissler, MD  
*Program Chairperson* **H**



**Presidents' Invited  
 Lecturer Art Rettig, MD**



**Left to right:  
 Drs. Bill Geissler,  
 Rocco Barbieri,  
 Sterling Mutz, and  
 Tsu-Min Tsai.**

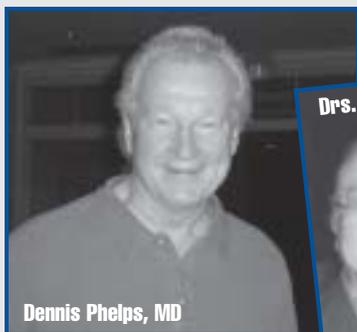


**Scientific Program presenter Dr. Jaiyoung Ryu (left) with the AAHS International Physician of the Year Dr. Alexandru Georgescu.**



**Dr. and Mrs. Keith Brandt**

**Plantation Party was held at the end of the Combined Day with members of ASRM and ASPN.**



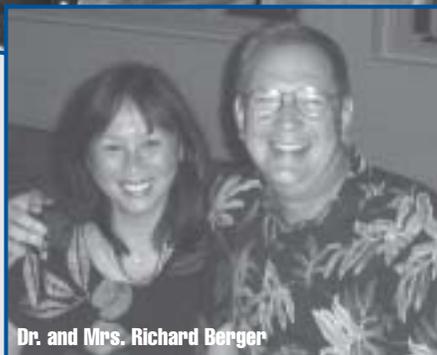
**Dennis Phelps, MD**



**Drs. David Chiu and Maria Siemionow**



**Exhibit hall**



**Dr. and Mrs. Richard Berger**

Hand Surgery  
 Quarterly

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 Spring  
 2003

## Aloha and Mahalo to All...

**A**nd for those who did not make it to our 2003 Annual Meeting, there is always next year, on January 14-17 in Palm Springs, California.

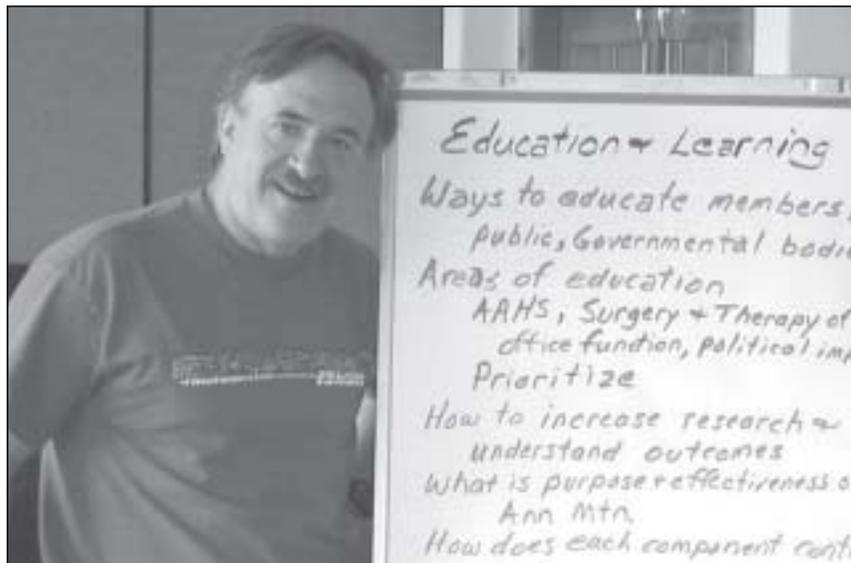
The meeting was a resounding success. These meetings, better described as events, keep getting better. They combine the cutting edge in hand care while in a glorious setting, with special time for family, friends and colleagues from across the world. Athletic and cultural experiences are also available for those who desire everything. The word is surely spreading, even Harrison Ford and Calista



**Hand Therapy Specialty Day Co-Chair Lynn Bassini, PT, OT with Bill Lineaweaver, MD (left) and Alan Freeland, MD**

Flockhart made it this year! The meetings have become so all inclusive and successful that we now have family and colleagues making plans on the last day for next year.

The theme of the meeting "Sports Medicine and Hand Surgery" opened with the Hand Therapy Specialty Day, co-chaired by Dr. Lee Osterman and myself. I want to thank my co-chair and



**Hand Therapy Program Co-Chair Lee Osterman, MD outlines the priorities for the day.**

speakers for making me look so good! Our faculty of therapists and physicians covered the theories, concepts and nuts and bolts for the Treatment of Upper Extremity Sports Injury: From the Elbow to Hand. This Therapy Day has become an exciting, well attended and integral part of the meeting. The secret behind a successful instructional day... having experts share with us their experiences, pearls of wisdom and taking home some new "tricks".

William Geissler, MD, Program Chair, orchestrated a fabulous meeting, second to none. Peter Amadio, MD eloquently presented the "Epidemiology of Hand, Wrist, Elbow Injury in Sports." Peter Weiss, MD, Keynote Speaker, enlightened us with a fascinating talk on "Ancient Greek Coinage" and stimulated our minds to become "lateral" thinkers. With Antonio DeSantolo, MD, our International Guest Speaker, we traveled through the history of hand surgery in Venezuela. Art Rettig, MD, the team physician for the Indianapolis Colts, delivered an impressive Presidential address on Hand Injuries in the NFL. His knowledge and experience is immense and sets valuable standards for all of us.

The contributions and stimulating discussions were many... there is not enough space to list them! I want to congratulate our first ever Humanitarian Award recipient, Mukund Patel, MD, whom I have known and admired for over 25 years, as well as the recipients of the Clinician/Teacher of the Year Awards for 2003: Physician Warren Briedenbach, MD; Physician Richard Brown, MD; International Physician, Alexandru Georgescu, MD; and Therapist Sue Michlovitz, PT, PhD, CHT. Sue won just about the Grand Slam of the meeting, as she was also a co-recipient of the Vargas Award, along with Paul Brach PT, CHT. Sue also received the Best Paper Award for "Continuous Low Level Heat for Wrist Pain." The Best Resident/Fellow Paper was given to Paul Grutter, MD, for "The Accuracy of Distal Posterior Interosseous and Anterior Interosseous Nerve Injection: A Tool for Preoperative Outcome Assessment for Wrist Denervation." The Best Poster Award went to Miguel Pirela-Cruz, MD, for "Posterolateral Exposure of the Elbow for Radial Head Fractures."

Our outgoing President, Alan Freeland, MD, deserves a standing ovation. His dedication, hard work,

## Paula G. Galaviz, MS, OTR, CHT

enthusiasm, and inspiration is beyond words. He remains a leader, a mentor, a team player, and a friend to all of us. He always made time to help, with a smile, a kind word and a meaningful contribution. Even difficult problems were ventured by him with ease and clarity. What an example to all of us! I applaud the Board of Directors, the Central Office, Program Chair, Hand Surgery Endowment, led by Miguel Saldana, MD, for a Champion year even in these difficult times. To the President Elect, Allen L. Van Beek, MD, I wish success. I know he has exciting plans for the new year and we will all



**Multiple award winner Susan Michlovitz, PT, PhD, CHT is congratulated by Immediate Past President Alan Freeland, MD.**

benefit and grow. I am so lucky to embrace one more year on the Board!

Our Annual Meeting was about learning and sharing in and out of the "classroom". All of us were joined by the professional passion we share, along with our families. We strengthened old friendships and made new ones. We had fun! Now we look into the future with new excitement for "lateral" thinking, the desire to explore new territories and make the current ones even better! See you all in 2004!

Lynn Bassini, PT, OT  
Hand Therapy Program Co-Chair **H**

**Personal:** I began my professional career in the small town of Watertown, WI, by working nine years with the developmentally disabled, and two years in general OT. In 1989, I received training at Dr. Robert Schenck's Chicago clinic, which enabled me to open a hand therapy clinic in Milwaukee.

I have been married to my husband Samuel for 19 years, and have four stepchildren who are now adults. I still live in my hometown where my personal interests include gardening (I make a great salsa), animals (dogs in particular) and soccer. Some of my free time is spent volunteering at a local therapeutic equestrian center. Last year, using the Spanish I had learned, my husband and I were part of a church mission group to Panama where we helped build homes. I hope to someday participate in medical mission work in a Spanish-speaking country. Looking at my life as a continual learning experience keeps me energized.

**Education:** MS in Therapeutic Science, 1994 University of Wisconsin – Madison; BS in Occupational Therapy 1979 University of Wisconsin – Milwaukee.

**Employer:** I have worked at the Froedtert Hand Center in Milwaukee, Wisconsin for the past 11 years. I was the supervisor of the clinic for eight years during the merging of our hospital with a local health system. Our Hand Center currently employs 13 hand therapists, and has six hand surgeons.

**AAHS Involvement:** I became an Affiliate member in 2001. I would particularly be interested in help-



**PAULA G. GALAVIZ, MS, OTR, CHT**

ing with projects in an international affairs committee. The results of our work with obstetrical brachial plexus palsy musculotendon transfer patients were presented at the most recent AAHS meeting in Hawaii.

**Best Part of My Job:** One aspect of my job that I really enjoy is being involved in the diagnostic evaluations of patients with our physicians and treating a wide variety of diagnoses. I also really enjoy my return to being a full time clinician without administrative responsibilities.

**Major Accomplishments:** The evolution of my career from working with developmental disabilities to the treatment of complex hand injuries.

**Clinical Specialties:** I greatly enjoy my work with Dr. Hani Matloub in our specialty clinic for patients with obstetrical and traumatic brachial plexus injuries.

**Greatest Challenge:** Surviving a clinic merger.

**Three Words That Describe Me:** Energetic, perseverant, and flexible. **H**

## Senior Director at Large Richard E. Brown, MD

**D**r. Brown came to the specialty of hand surgery somewhat by chance. He obtained his undergraduate degree in Zoology from Eastern Illinois University and his M.D. from the University of Illinois. With the intent of returning to southern Illinois to practice medicine, he initially planned to secure a family practice residency. However, general surgery caught his interest while still a medical student. As a general surgery resident, the breath and diversity of plastic surgery lured his interest thus leading to a plastic surgery residency at the University of Massachusetts. As part of that training, Dr. Brown spent 3 months with H. Kirk Watson in Hartford, Connecticut where an interest in the wrist was begun.



At the conclusion of his residency in 1988, he returned to his home state and began an academic career at Southern Illinois University as an assistant professor in the division of plastic surgery. There he continued his interest in hand and microsurgery and in 1995 began and

became the director of Southern Illinois University's hand fellowship program, an interesting outcome for someone who as general surgery resident once questioned a fellow resident on why in the world would anyone want to give a general surgery grand rounds on "hand surgery!"

Dr. Brown considers himself a "worker bee" rather than a leader. He has been active in numerous organization and societies. He became a member of the American

Association for Hand Surgery in 1992 and has missed only one or two annual meetings since 1987. He has been active the AAHS serving as the annual program chairman in 1998 and as board director at large for the past two years. He has also served on numerous committees and is now the AAHS representative on the board of the American Society of Plastic Surgeons. He volunteered in Guatemala in 1995 and accompanied the Vargas winner to Cairo, Egypt in 2000.

Dr. Brown has been married to his wife, Colleen, for almost 22 years and has three children, Matthew (20), Katie (19), and Emily (17). They, too, enjoy attending the annual AAHS meetings! He owes his sanity to his family, his faith, and an occasional round of golf.



The American Association  
for Hand Surgery  
would like to thank our  
7th Annual "Day at the Links"  
Golf Tournament Sponsors:

**Cook Vascular Incorporated**

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# The Wireless Craze

Visiting a hotel recently, I was struck by the telephone in the bathroom. Indeed, it was the last century that required harnessing communications technology to the wall with wires. We now take the cell phone for granted, but what about data communications? The same advantages and flexibility of voice technologies could bring us into a whole new world if applied to data, especially with the continued rapid pace of Internet application development. Internet-enabled networks combined with anywhere-to-anywhere data transmission would bring about revolution in medical informatics, where an estimated 25% of the healthcare bill nationally is spent on recollecting

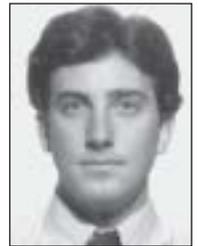
and recording information.

Connectivity to the Internet by our cell phones and palmtops begins to wet our appetites for the potential of wireless data flow. But, like the Internet itself, wireless speed and security have both been significant challenges. While an intercepted phone call is one thing, credit card information and personal health data are substantially more critical to secure. The potential for wireless data communications in medicine, therefore, must reach the standard benchmarks for patient confidentiality and HIPAA compliance to be of commonplace utility.

One exciting frontier in all of this is Ultra-Wideband (UWB) radio technology. Based on old fashion radio concepts, UWB accommodates multiple streams of digital data, possesses unique security characteristics, and is immune from interference and jamming. Unlike some wireless technologies, there is

no "line of site" requirement with UWB. Signal tracking is 3-dimensional in space, and the technology is just beginning to realize commercialization. Watch for it as more and more of our data communications are liberated, and wireless networking becomes a reality in our day to day practice of medicine. **H**

*Editor's Note: J. Daniel Labs, MD has notified the HSQ staff that this article is to be his last contribution to The Digital Hand Surgeon column. The Association would like to thank Dr. Labs for his informative and insightful writing over the past four years, and for helping AAHS members keep their practices and computers digitally up to date. His enthusiasm, professionalism and contributions have been greatly appreciated by all. Thank you, Dr. Labs!*



**J. DANIEL LABS, MD**

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# Fall Sports Injury Coding

By Leon S. Benson, MD



LEON S. BENSON, MD

In this issue, the Coding Corner will focus upon "Fall Sports Injuries." According to high school and NCAA schedules, activities that dominate autumn calendars include football, cross country, soccer, volleyball, and field hockey. Consequently, we will be reviewing codes for hand injuries that frequently are associated with these sports: finger fractures and dislocations.

Finger fracture and dislocation codes are comprised of 19 items, all within the 26700 grouping. Eight of these codes deal with joint dislocation. MCP joint dislocation has its own code group; the PIP and DIP joints are bundled together as "interphalangeal joints." Closed reduction of a joint without anesthesia has a specific code (26700 for MCP, 26770 for PIP/DIP). This would be used, for example, if the physician reduces a joint on the sideline or perhaps on initial assessment in an emergency room when a local anesthetic injection is not required. Reduction of the joint requiring anesthesia (local injection or IV sedation) warrants use of another code (26705 for MCP, 26775 for PIP/DIP). For dislocations that are very unstable and require percutaneous pinning, codes 26706 (MCP) and 26776 (PIP/DIP) are appropriate. If the dislocation is complex and an open surgical approach is required, then 26715 would be used for the MCP and 26785 would be used for the interphalangeal joints. Remember that each of these codes corresponds to a single treated joint; extra codes would be warranted for each additional dislocated joint.

Treatment of phalangeal shaft fractures corresponds to another four codes. These designations address the proximal and middle phalangeal shafts; the distal phalanx has its own set of codes. Distinction is made as to whether the fracture is treated closed without manipulation (26720), closed with manipulation or traction of some kind (26725), with percuta-

TABLE 1: Finger Dislocations

MCP Joint	
26700	Closed treatment without anesthesia
26705	Closed treatment with anesthesia
26706	Percutaneous fixation
26715	Open surgical approach Interphalangeal Joints (PIP and DIP)
26770	Closed treatment without anesthesia
26775	Closed treatment with anesthesia
26776	Percutaneous fixation
26785	Open surgical approach

TABLE 2: Proximal and Middle Phalangeal Shaft Fractures

26720	Closed treatment without manipulation
26725	Closed treatment with manipulation or traction (skin or skeletal)
26727	Percutaneous fixation
26735	Open surgical approach (with or without internal or external fixation)

neous pinning (26727), or with an open surgical approach (26735).

Treatment codes for the distal phalanx are similar to those for the phalangeal shaft noted above. Closed treatment of a distal phalanx fracture without manipulation corresponds to 26750; manipulation of the fracture corresponds to 26755. Percutaneous fixation of the distal phalanx would warrant 26756 and an open approach to the fracture corresponds to 26765.

The last three codes in the 26700 family deal with articular fractures. The MCP, PIP, and DIP joints are all included in this sub grouping. Closed treatment of an articular fracture without manipulation corresponds to 26740; if manipulation is required, 26742 is appropriate. If an open surgical approach is needed to treat an articular fracture of any of the finger joints, then the correct code is 26746.

The various groupings for finger fracture and dislocation codes are noted in the tables below. Remember that these codes apply to the thumb as well, and for each additional procedure performed, a -51 modifier is appropriate.

## You Code It

A college football player sustains a dorsal dislocation of the thumb MCP joint, a nondisplaced tuft fracture of the thumb distal phalanx, as well as a dorsal index PIP dislocation and a spiral shaft fracture of the long finger middle phalanx. The PIP dislocation of the index finger can be reduced closed (local anesthetic injected) but the thumb MCP

TABLE 3: Distal Phalangeal Fractures

26750	Closed treatment without manipulation
26755	Closed treatment with manipulation or traction (skin or skeletal)
26756	Percutaneous fixation
26765	Open surgical approach (with or without internal or external fixation)

TABLE 4: Articular Fractures of MCP, PIP, and DIP Joints

26740	Closed treatment without manipulation
26742	Closed treatment with manipulation
26746	Open surgical approach (with or without internal or external fixation)

joint is stuck and requires an open approach to disentangle the volar plate. The thumb distal phalanx tuft fracture requires only splint protection, but the long finger middle phalanx fracture is very unstable and requires an open reduction which is then stabilized with two screws.

**Solution:**

- 26715 Open approach to MCP dislocation (thumb in this case)
- 26750-51 Closed treatment of distal phalanx fracture without manipulation (thumb in this case)
- 26775-51 Closed treatment of interphalangeal dislocation (index PIP in this case) with anesthesia (local in this case)
- 26735-51 Open approach to phalangeal shaft fracture (long finger middle phalanx in this case). 

## Coding Update on Kienbock's

Dear Administrator,

I work for a Hand Surgery Associates of Michigan, Guy Pierret, Edward F. Burke, DO, Richard M. Singer, MD, Mehul M. Mehta, MD, Robert S. Barbosa, DO, Samson P. Samuel, MD, John R. Wagner, Jr., MD, Jeffrey M. Hall, MD, Jeffrey E. Gorosh, DO. I am a certified professional coder and the billing manager for the practice. In reviewing the AAHS Autumn 2002 quarterly newsletter, I noted the abstract on Kienbock's disease written by Stiles T. Jewett, Jr., MD, FACS. The article highlights CPT codes to report for the various procedures performed during the indicated stages. I am writing to share with the author the new CPT code 25430 published by the American Medical Association January 2002. The definition of the code is for the insertion of a vascular pedicle into a carpal bone. Thus this code may assist the billing process for fellow peers in reporting revascularization during Stage I, II & IIA cases. I normally code this in addition to open treatment of carpal bone fracture codes 25628 or 25645 with modifier 59. Coding the unlisted wrist code 25999 may tie claims up in the manual review process. Thus using a published code quickens the process and ensures reimbursement.

In conclusion, this just a friendly note to correspond helpful information with a fellow society of our partners.

Sincerely,

Dawn L. Collins, CPC

The AAHS Board of Directors and the 2003 Annual Meeting Program Committee would like to thank the following companies for their support and participation:

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## Fall Sports Injuries

While hand and upper extremity injuries can occur while participating in sports and activities at any time of year, this issue will take a look at some that tend to crop up with those sports whose peak competitive season is in the fall. Moderating the discussion is physiatrist **Keith Bengtson, MD**, Director of Hand Rehabilitation, Mayo Clinic, Rochester, MN. Our panel members are hand surgeons **Mark Cohen, MD**, Associate Professor, Director, Hand and Elbow Section, Dept. of Orthopaedic Surgery, Rush-Presbyterian-St. Lukes Medical Center, Chicago, IL, **Kevin D. Plancher, MD**, Associate Clinical Professor Albert Einstein College of Medicine, New York, NY, **Plancher Orthopaedics and Sports Medicine**, Greenwich, CT and New York, NY, and **Brian Sennett, MD**, Assistant Professor, Chief of Sports Medicine, Department of Orthopaedic Surgery, University of Pennsylvania, Philadelphia, PA, and hand therapist **Susan Michlovitz, PT, PhD, CHT** Professor, Physical Therapy, Temple University, Philadelphia, PA.



**I USUALLY TRY TO SLOW DOWN THE REHABILITATION PROGRAM IN THESE ATHLETES SINCE MOST ARE SO MOTIVATED TO RETURN TO THEIR SPORT QUICKLY.**

**KEITH BENGTSON, MD**

**Dr. Bengtson:** First of all, I'd like to thank all the panel members for participating in this roundtable discussion on fall sports injuries. According to the Minnesota State High School Athletic League, fall sports include football, volleyball, girl's tennis, cross country running, soccer and cheerleading. When we think of fall sports injuries, we usually think of football, so I'd like to start off by asking Dr. Sennett what he sees as the most common upper extremity injuries in football

players.

**Dr. Sennett:** The most common sites of injuries that I encounter involve both the proximal and distal aspects of the extremity. We treat many shoulder injuries due to the vulnerable position of the shoulder while tackling. The most common injuries involve anterior glenohumeral dislocations and "burners". Burners are a common traction injury to the brachial plexus which occur as a result of tackling. At the distal aspect of the extremity we see a multitude of hand injuries. These include fractures involving the

metacarpals and phalanges, ligamentous injuries, and contusions. The most common ligamentous injuries involve the ulnar collateral ligament of the thumb and the scapholunate ligament in any football player who lands on the outstretched upper extremity. The injuries to the ulnar collateral ligament of the thumb typically involve lineman and quarterbacks due to its vulnerable location in these position players. We also occasionally encounter injuries to the elbow.

**Dr. Bengtson:** Dr. Plancher, talk about elbow injuries, especially the assessment and treatments of injuries involving medial elbow instability.

**Dr. Plancher:** Extreme valgus forces are usually generated across the elbow on the inside of the elbow (medial side) in several overhead sports such as pitching, women's tennis and gymnastics. The key is early diagnosis, because you can have a positive outcome with conservative intervention. It is the repetitive valgus injury to the elbow that can lead to a recurrent microtrauma and attenuation of the medial collateral ligament. If ultimately not treated, it may cause rupture of the medial collateral ligament.

Patients come in and usually describe a pop on the inside of the elbow. They may have pain with early acceleration cocking of the elbow, such as serving or throwing.

More often than not, there is pain over the ulnar nerve and in fact 40% of patients have ulnar nerve symptoms. There may be some pain over the posterior aspect of the elbow. Diagnosing a medial collateral ligament tear includes valgus stress testing with the elbow slightly flexed, holding the arm, or the milking sign where one holds the thumb and gives a valgus stress to the elbow to reproduce pain to the elbow.

**Dr. Bengtson:** What type of imaging might one look at?

**Dr. Plancher:** Plain radiography may show calcification of the ulnar collateral ligament. There may be, if it is a chronic injury, a traction spur or a loose body seen off the ulna on an axial cubital tunnel view. A valgus stress test may help show a large opening on the inside of the elbow. We have looked at MRI versus CT arthrogram. At first we felt the MRI was the most sensitive and specific. It is 100% sensitive for a complete tear of the medial collateral ligament. The CT arthrogram is sensitive 80% of the time and specific 91% of the time, and therefore much more helpful in making a diagnosis of a partial tear.

**Dr. Bengtson:** Dr. Michlovitz, if you see a patient such as this with an unstable medial elbow after surgical repair, what types of strategies do you use to begin protected range of motion exercises following these type of surgeries?

**Dr. Michlovitz:** If the patient is put into a limited motion splint by the physician I would have them exercise in flexion and extension and when they come out of the splint for hygiene make sure they avoid valgus stresses. If they have irritation of the ulnar nerve, I would make sure that they did not spend time in extremes of elbow flexion, particularly when they're sleeping. And then I would work on isometric strengthening of flexors and extensors across the elbow while they're in a limited motion splint; then work toward supination and pronation after the splint is discontinued.

**Dr. Bengtson:** Now, is there any particular time that you begin the strengthening?

**Dr. Michlovitz:** I think it would probably have to do with the stability of the joint (that the physician obtained during the procedure) and the person's age. The younger they are probably the faster they will heal. Typically, I might begin at two to four weeks with isometric exercises and grip activities within the confines of the limited motion splint, avoiding any type of strengthening that would adversely apply stress on repaired or reconstructed the medial elbow structures.

**Dr. Plancher:** I like our patients to wait six weeks. I like them to regain motion in a hinged splint avoiding valgus stress and then at six weeks I think the structures are ready for strengthening. Return to sports should be slow, four to six months. An interval throwing program moving at a slow pace is the best way to get someone back.

**Dr. Bengtson:** Okay. Let's not neglect volleyball. Perhaps I can have Dr. Cohen comment on the types of finger injuries one might see in volleyball players?

**Dr. Cohen:** I think the most common injury at the distal joint would be a soft-tissue or bony mallet injury in which an individual is attempting to extend their fingers upon contact with the volleyball. The ball causes an acute flexion moment leading to

disruption of the terminal extensor tendon at the distal phalanx often with an accompanying fragment of bone. These injuries can typically be treated by closed means with static extension splinting. At the proximal interphalangeal joint, again axial load is the primary force, but more commonly one sees a hyperextension injury leading to disruption of the volar plate. The volar plate can fail by soft-tissue alone or with a fragment of bone off of the base of the middle phalanx. In addition, you can have associated or isolated collateral ligament tears (sprains), medially or laterally. In higher energy trauma, one can have impaction most commonly of the base of the middle phalanx onto the head of the proximal phalanx. These fracture-subluxations and dislocations are the injuries that more commonly will require surgical intervention.

**Dr. Bengtson:** Dr. Cohen, what's the best way to assess instability at the PIP joint?

**Dr. Cohen:** It is one of the most congruous joints in the hand and without a significant bony injury, it is very uncommon to have proximal interphalangeal joint instability, even in dislocations with rupture of one or both of the collateral ligaments.

**Dr. Bengtson:** Do you like to get lateral x-rays in any particular position?

**Dr. Cohen:** I think that it is important when evaluating the small joints of the hand radiographically to obtain films centered and perpendicular to the joint or joints in question. If there is any question regarding stability, certainly one can obtain additional films, such as lateral views in different degrees of flexion, to evaluate joint congruity and the tendency for dorsal subluxation in extension.

**Dr. Bengtson:** Dr. Michlovitz, these PIP joints are notorious for stiffening up following injury or surgery. Do you have any special strategies for keeping these joints mobile?

**Dr. Michlovitz:** Yes I do. It really depends on the direction of joint

instability. If it's an ulnar or radial instability, then I would consider buddy taping fingers and having the person work through their full available and pain-free range of motion stressing full extension. If there has been a volar plate rupture, they are allowed to come into as much extension as possible within the confines of the dorsal splint (without causing a subluxation of the joint).

**Dr. Bengtson:** Do you like to see them every week and try to extend them further or is that too often?

**Dr. Michlovitz:** I think you should build them into a bit more extension each week over a few weeks time period.

**Dr. Bengtson:** Dr. Sennett, perhaps you could contrast the impact injuries to fingers of volleyball compared with the grabbing injuries that one sees in football players?

**Dr. Sennett:** Many of the injuries with volleyball are axial load injuries whereas the injuries in football occur as a result of multiple forces. These include rotational, compressive, tensile, and axial loading forces. Compressive forces often result in hand fractures due the impact on the hand as it is caught between two helmets or occurs as a player's hand is stepped on. Rotational fractures are incurred when a player grabs an opponent's jersey and there is a rotational component to the applied force resulting in an oblique fracture. An injury that is particular to football is a "jersey finger", which is an avulsion of the flexor digitorum profundus. When the fingers are held in a flexed position, the finger that is

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**IT IS THE REPETITIVE VALGUS INJURY TO THE ELBOW THAT CAN LEAD TO A RECURRENT MICROTRAUMA AND ATTENUATION OF THE MEDIAL COLLATERAL LIGAMENT.**

**KEVIN PLANCHER, MD**

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most proximal is the ring finger. This position places makes it vulnerable and predisposes it to injuries of the flexor digitorum profundus as the hand is in that gripped position while making the tackle. If it is identified early, it often can be repaired directly. Radiographs can occasionally

demonstrate an avulsion of the volar aspect of the distal phalanx. This avulsed fragment can be located distal or proximal to the proximal interphalangeal joint. Unfortunately, many of the athletes do not present at the time of the injury but present at the end of the season. At that time, many of these injuries are chronic in nature and the appropriate treatment at that time is often observation and mobilization of the digits as direct repair is not possible. If a tender mass is present in the palm, excision of the mass can be performed. Instability at the distal interphalangeal joint can be managed with arthrodesis.

Fortunately, many players do not have a significant disability with an unrepaired avulsion of the flexor digitorum profundus (FDP).

**Dr. Bengtson:** Dr. Sennett, if you see a player that has the tendon retraction all the way into the palm, realistically how soon do you have to repair it primarily?

**Dr. Sennett:** This injury should be repaired within seven to ten days before any tendon degeneration or myostatic contracture occurs. It is not the type of injury that I would

let a player compete with for the remaining two to three weeks of the season and plan to repair after the season had ended.

**Dr. Bengtson:** Since girl's tennis is a fall sport, I'll ask Dr. Plancher to say a bit about his approach to assessing and treating tennis elbow.

**Dr. Plancher:** Tennis elbow is so common it may affect 50% of people over the age of 40. Sports participation in girls and boys leagues has become so aggressive that young athletes are becoming injured. Pain is located on the lateral aspect of the elbow, about 25 mm distal and anterior to the lateral epicondyle. The athlete usually complains that extension of the wrist aggravates the symptoms. We now know from studies that the elbow can withstand a normal angular velocity of 1,146 degrees per second during a tennis serve. Unfortunately, the angular velocity produced by the elbow serve is 2,152 degrees per second. We are, therefore, beyond the normal contractile velocity of the medial collateral ligament, as well as the lateral side of the elbow. Coaches need to watch athletes' practicing so that they use their whole body to absorb the large, angular forces across the elbow.

A thorough physical examination must be completed when a patient complains of lateral elbow pain because there is a large differential diagnosis that cannot be ignored. Patients might be tender over the extensor carpi radialis brevis on the lateral side of the elbow. Pain is present with passive resisted extension. Athletes must have a normal neck examination and a normal neurological examination. Cervical degeneration or disc disease can still be present and should not be ignored. We must always think of any intraarticular pathology, be it a loose body or osteochondritis dessicans, or maybe radio-capitellar arthrosis. Because we are getting better with arthroscopic techniques in the elbow, there are some players where we identify a snapping plicae syndrome. We also have athletes who have entrapment of the musculocutaneous nerve,

caught between the biceps and brachialis. Some patients complain of symptoms of nocturnal forearm pain, or pain over the extensor carpi radialis longus and brachioradialis with pain on resisted supination of the extended forearm and we cannot forget about the diagnosis of entrapment of the posterior interosseous nerve.

**Dr. Bengtson:** Assuming that they fail all conservative treatment, at what point do you consider surgery for these folks?

**Dr. Plancher:** Some patients complain of lateral epicondylitis with tennis elbow that is only two weeks old, and I will treat them with conservative treatment. Some patients come in at one month, and other patients come in with symptoms greater than three months old, and even through the x-rays are almost always normal, there can be some soft tissue calcification found.

In almost all cases I will wait 6-9 months before I intercede with surgical intervention. Patients need to fail a *quality* rehabilitation/occupational hand therapy program before I entertain any type of surgical intervention. We know from recent studies in *The Lancet* and *Clinical Orthopaedics* that the difference between a steroid injection given once versus occupational hand therapy has shown that *long-term occupational hand therapy patients did better 52 weeks out, than did patients who were given an injection of a steroid type material*. These studies did show that the group of patients that had an injection, may have done better in the acute period (6 weeks). The patients and athletes who fail a quality rehabilitation program, since most patients (88-90%) do well, will be considered for surgical intervention. This group represents 5-8% of the patients who come in to my office with symptoms of lateral epicondylitis. The group that ultimately has surgical intervention will have a 97% improvement, and 90% of those patients will return to sports.

Complications from surgery to the lateral side of the elbow, are now being seen in an increasing fre-



**THE PIP JOINT IS ONE OF THE MOST CONGRUOUS JOINTS IN THE HAND AND WITHOUT A SIGNIFICANT BONY INJURY, IT IS VERY UNCOMMON TO HAVE PROXIMAL INTERPHALANGEAL JOINT INSTABILITY.**

MARK COHEN, MD

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quency. Post-surgical instability due to iatrogenic injury to the lateral collateral ligament from tendon slide procedures are becoming all too common. It is from this injury that we are now recognizing an increasing percentage of patients with posterolateral rotatory instability. Other postoperative patients may have been operated on with an incorrect diagnosis, when in fact they may have needed a radial tunnel release. Regardless of who undergoes surgical intervention, it is still more important, especially for tennis players to consider videotaping their stroke and have a full analysis performed by the tennis coach. This should be done even prior to commencing a conservative rehabilitation program.

**Dr. Bengtson:** Perhaps I could have Dr. Michlovitz tell us what she considers a quality rehab program for tennis elbow?

**Dr. Michlovitz:** First of all, I would consider temporarily reducing the activity that produces the symptoms. Some patients who have had chronic problems have limitations

in end range extension and, as Dr. Plancher was discussing, it may be a joint pathology that's causing the symptoms. Then it may be appropriate to try to restore full extension. I also would have the person work on strengthening exercises of the extensor carpi longus, extensor carpi brevis and the extensor digitorum. Beginning first with isometric exercises within a pain-free motion at different points in the range of motion, and then progressing to eccentric loading activities. There is some evidence in the literature taken primarily from patients with chronic Achilles tendinopathies and also in patient's with lateral epicondylitis that a strengthening program of eccentric exercising may be effective in reducing pain and enhancing function.

There is also some evidence in the literature (*Archives of Physical Medicine and Rehabilitation*, 1999) that changes in reaction time and speed of activity occur in patients with chronic lateral epicondylitis. I think we need also to consider activities to enhance speed of reaction time in these patients; I'm not

sure that that previously has been discussed in the literature. Then I would have them work on the mechanics of the activity to return to their activity in a pain-reduced or pain-free time period.

**Dr. Bengtson:** Does anyone else have any other methods that they employ in returning athletes back to playing tennis with lateral epicondylitis?

**Dr. Sennett:** The other methods that I utilize include activity modification. The two modifications that I employ in tennis players include grip size verification and anti-vibration devices. The correct grip size is determined by the distance measured, in inches, from the tip of the middle finger to the distal palmar crease. Individuals who play with too small of a grip suffer from "over-gripping" and increase the stresses on the lateral epicondylar musculature. The second modification involves the use of an anti-vibration string or a dampening device which can be placed at the

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base of the head of the racket to absorb shock at impact. This decrease in vibration helps in decreasing the loads on the elbow at impact.

**Dr. Cohen:** Just to add to Dr. Sennett's comment, the primarily determinant of vibration transmitted to the epicondyle and soft-tissues is the stiffness of the racket, not the string tension. Thus, changing to a stiffer racquet may also help symptomatic patients.

**Dr. Plancher:** In all sports it is important to strengthen the arm, the lower body, trunk and abdomen so as to avoid high torque and ultimately injuries across the elbow. There is also misinformation, in my opinion, spread to the public. Acupuncture, although it has some benefits, usually doesn't last more than 24 hours. In the literature, there is insufficient evidence to either support or

refute the use of a neo-laser acupuncture for lateral epicondylar pain. There are also some new reports about performing shock-wave therapy. Asia's reports are good, but there are two reports out of Germany with conflicting results. Of note, patients have recently been complaining of post-operative migraines with this new treatment. A quality rehabilitation program from a trained hand and elbow therapist can help patients more often and get them back to playing sports more than many of these new modalities.

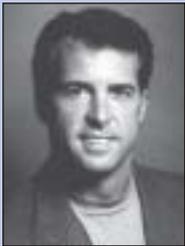
**Dr. Bengtson:** Dr. Sennett, perhaps you could talk about the type of protective splinting that one can use in high school and college sports and what the regulations are in this regard?

**Dr. Sennett:** In football players, there really are three modes of protective splinting that exist. These include athletic taping which is the cheapest but less resistant of the modalities. Taping can provide varying degrees of immobilization and rigidity due to its applied thickness and is very helpful in managing the athlete with contusions and ligamentous strains. Second, there are molded Orthoplast splints, which are very effective in immobilizing digits, especially tuft fractures of the phalanges. The most effective protection is cast immobilization. Casting provides the most external stability to an injured hand or wrist, but must be padded for competition. The padding provides protection not only for the individual wearing the padding but for the opposing

players as well. High schools should be contacted for specific high school regulations for padding thickness in a physician's athletic conference.

**Dr. Bengtson:** A natural conclusion is to have each of the panel members say a bit about the philosophy or strategy for determine when an athlete can return safely to play.

**Dr. Sennett:** When managing today's athletes, it is very important that an athlete understands their injury, pathology, and any potential outcome that may arise from playing with an injury. Upon returning an athlete to competition, the injured extremity must be stable (casting if necessary), and have both a full range of motion and strength in the remainder of the involved extremity. Injuries need to be followed very closely after return to competition and fractures should be monitored radiographically to ensure that there has not been any change in alignment. In addition, all injuries should be



**[AN FDP] INJURY SHOULD BE REPAIRED WITHIN SEVEN TO TEN DAYS BEFORE ANY TENDON DEGENERATION OR MYOSTATIC CONTRACTURE OCCURS.**

**BRIAN SENNETT, MD**



### "EAST MEETS WEST"

**POST-IFSSH MEETING**

**JUNE 19-21, 2004**

**BUCHAREST, ROMANIA**

**FOLLOWING THE IFSSH MEETING IN BUDAPEST, HUNGARY**

This meeting is organized by the **Romanian Society for Surgery of the Hand** and the **American Association for Hand Surgery**, and is endorsed by the RSRM, ASRM and IFSSH. The post-congress will be held in an area of Europe well known for its natural beauty, history, art, and architecture and will offer an academic program of benefit to both hand surgeons and microsurgeons. We look forward to hearing from all interested practitioners. Please contact the AAHS representative for the congress, Jaiyoung Ryu at [jryu@adelphia.net](mailto:jryu@adelphia.net) for further information.

evaluated at the end of the season to assess their outcome.

**Dr. Plancher:** I like to divide my athletes by age category: The years before high school, high school and those I treat professionally. With the first group it is very important to work with them and help their parents understand it is better to be cautious and fully recuperate the child so they do not have future problems. In instability of the elbow, too often we have 8 to 10 year-old boys and girls throwing pitches they should not be throwing, such as curve balls. These athletes get injured and for the next 2-4 years, as the growth plates grow, they have increasing problems, and

never really heal. I would rather intercede early and have young players try longer conservative treatment. We will have a better outcome for these players if parents and players realize rest and stopping the sport activity will strengthen the muscles about the joint and will help to further their career in sports. High school players need a similar treatment regime, except our role as physicians is increased with a one-on-one relationship with the athlete, and less involvement with the parents. The professional athlete should be treated similarly. Unfortunately, at times, common sense and cooperation wrongly lose out and are often ignored.

## 2004 Application for Research Grants

The AAHS Research Grant Awards were established to further the purpose of the Association as stated in its Bylaws and to foster creativity and innovation in basic and/or clinical research in all areas pertinent to hand surgery.

### Awards and Eligibility

Grants will be made for a one year period to up to three investigators. Grants are available to all AAHS members. One of the investigators must be an active or affiliate member of the association.

### Grant Application

Applications may be obtained from:  
American Association for Hand Surgery  
20 N. Michigan Avenue, Suite 700  
Chicago, Illinois 60602

Applications (an original plus seven copies) must be received by the committee chair no later than **Monday, November 3, 2003**, in order for the judging to be completed in time and the recipients to be announced at the Annual Meeting.

The AAHS and the Research Committee are required by the IRS to document disbursement of grant funds. Award recipients will be required to sign a letter of acceptance and submit a progress report once each year. The AAHS must be acknowledged as the source of funding in any presentation or publication. A final report must be submitted at the completion of the study. It is expected that the results of the funded research be submitted for presentation at an Annual Meeting within two years of the receipt of the award.

Funds must be returned to the AAHS if the study is not undertaken within twelve months of the receipt of the award.

Failure to follow these guidelines will disqualify the recipient from any further grant opportunities and from presenting any papers at the AAHS Annual Meeting for a period of three years following such default.

### Mail Grant Proposals to

Saleh M. Shenaq, MD  
Baylor College of Medicine  
6560 Fannin Street, Suite 800  
Houston, TX 77030



**Dr. Cohen:** I think as healthcare professionals, it is our responsibility to ensure that an individual does not cause irreparable harm to their upper extremities following trauma. In our practice, we are seeing a greater number of young individuals who consider themselves "athletes" and do not understand the implications of returning to their sport too soon. We have to distinguish these young recreational players and those individuals who make a living from their participation in sports. The younger and often less talented individuals cannot always appreciate discussions on the risks of playing injured.

**Dr. Michlovitz:** I just would like to add some things from the therapist's viewpoint. Frequently we are the healthcare practitioner that spends the most amount of time with these kids or young adults in their rehab phase. We really try to stress compliance and safety with the athlete, to make sure that if he/she has to play with protective gear, it is understood why this is done in that competitive sport and also at recreational times. We also spend a considerable amount of time with their parents who oftentimes have expectations for the children that may not be realistic at that point in time. We need to explain to the parents why the rehab program is being performed and that we're not trying to eliminate their child's possibility of being an athlete, but rather to make sure that they're safe during playing the sport and that there is not irreparable damage.

**Dr. Bengtson:** I'd like to thank all of the panel members for an informative discussion and for lending your time and expertise to this roundtable discussion. 



**FOR TENNIS ELBOW,  
A STRENGTHENING  
PROGRAM OF  
ECCENTRIC  
EXERCISING MAY BE  
EFFECTIVE IN  
REDUCING PAIN AND  
ENHANCING FUNCTION.**

**SUSAN MICHLOVITZ, PT,  
PHD, CHT**

Hand Surgery  
Quarterly

.....  
Spring  
2003

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# American Association for Hand Surgery Calendar

## 2003

**April 10–12, 2003**  
Post Traumatic  
Reconstruction of the  
Upper Extremity  
Hotel Inter-Continental  
Chicago, IL

**July 18–20, 2003**  
Mid Year Board of  
Directors Meeting  
Casa Del Mar  
Santa Monica, CA

**September 17–19, 2003**  
American Society for  
Surgery of the Hand – 58th  
Annual Meeting  
Chicago, IL

## 2004

**January 14–17, 2004**  
34th Annual Meeting  
Westin Mission Hills  
Palm Springs, CA

**March 10–14, 2004**  
American Academy of  
Orthopaedic Surgeons –  
Annual Meeting  
San Francisco, CA

**Spring, 2004**  
Work Related Disorders of the  
Upper Extremity  
Wyndham Chicago

**June 11–14, 2004**  
Mid-Year Board of Directors  
Meeting  
St. Regis Monarch Beach  
Resort  
Dana Point, CA

**September 9–11, 2004**  
American Society for Surgery  
of the Hand – 59th Annual  
Meeting  
New York, NY

## 2005

**January 12–15, 2005**  
35th Annual Meeting  
Sanibel Harbor Resort  
Sanibel Island, FL

**September 22–24, 2005**  
American Society for Surgery  
of the Hand – 60th Annual  
Meeting  
San Antonio, TX

## 2006

**January 11–14, 2006**  
36th Annual Meeting  
Loews Ventana Canyon Resort  
Tucson, AZ

**September 7–9, 2006**  
American Society for Surgery  
of the Hand – 61st Annual  
Meeting  
Washington, DC

## 2007

**January 10–13, 2007**  
37th Annual Meeting  
The Westin Rio Mar  
Beach Resort  
Rio Grande, Puerto Rico

## 2008

**January 9–12, 2008**  
38th Annual Meeting  
The Westin Century Plaza  
Hotel & Spa  
Beverly Hills, CA

For information contact: AAHS Central Office at 312-236-3307 or [www.handsurgery.org](http://www.handsurgery.org)

**HAND SURGERY**  
QUARTERLY



[www.handsurgery.org](http://www.handsurgery.org)  
20 North Michigan, Suite 700  
Chicago, IL 60602

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