



NEWSLETTER

VOL. 26, NO. 1

Academy for Sports Dentistry
presents 30th Annual Symposium

Sports Dentistry Update 2012

*Featuring Women in Sport - Celebrating
the 40th Anniversary of Title IX*



June 21-23, 2012
Minneapolis
Marriott City Center

www.academyforsportsdentistry.org



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The Academy for Sports Dentistry Newsletter is published tri-annually for its members. Comments and suggestions regarding the newsletter should be directed to Dr. Steve Mills, Editor.

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Paul Nativi, DMD, FASD

Mark Your Calendar

I hope everyone has marked their calendars for June 21 – 23. The 2012 Academy for Sports Dentistry [ASD] annual Symposium is fast approaching. Minneapolis is a great family friendly summer destination combining the arts, nightlife, and outdoor activities. The Marriott City Center Hotel is located in the heart of downtown with easy access to the Twin Cities' top attractions.

I would like to thank the members of the Symposium Committee for all their hard work. They have assembled an impressive line up of speakers and topics. We have the opportunity to learn from experts about mouthguards, splinting, photography, new aspects of treating dental trauma, and treating professional athletes. To celebrate the 40th anniversary of Title IX, a series of lectures focusing on the Female Athlete will be presented. Not only are these lectures timely but will also reward the attendees with insight into, and knowledge of, the treatment of female athletes. Please check the Academy's website at www.academyforsportsdentistry.org for a complete lineup of speakers, topics, times and events.

The popular President's Reception and Silent and Live Auction of sports memorabilia will be held Friday evening. It is a fun event and an opportunity to kick back, visit with old and new friends, and win unique sports related items. Auctioneer Dr. Hans Stasiuk and his able assistant Dr. Jan Chithalen are always entertaining and do an excellent job of adding to the evening festivities. Heavy appetizers are complimentary and drinks are available. Anyone having sports related items, such as autographed articles, team gear, etc., to donate is asked to contact Ms. Shelly Lott. The more items we receive, the more fun we have, and the more money we raise for the ASD.

The ASD could use your help. All members are encouraged to work to secure exhibitors and sponsors for the upcoming Symposiums. Exhibitors and sponsors are a very important component for a successful Symposium. Their fees help underwrite the costs of staging our Symposium. Please support the companies that support the ASD.

It is my hope that all members will work to publicize our Symposium. Notify your local dental societies. Circulate our Symposium brochures. Above all, plan on attending the 2012 Symposium and bring you friends and colleagues. Take advantage of the Member-Bring-A- Colleague Program. You get a 10% discount off the Symposium registration fee for every non-member you bring and the non-member also gets a 10% discount. Encourage them to get involved in sports dentistry and to join the ASD. Let us all experience the learning, exchange of ideas and camaraderie that is our ASD Symposium.

See You in Minneapolis!



NEWS BRIEFS

Mouthguard Position Statement Refined

The liaison from ASD to the Joint Commission on Sports Medicine, Dr. Jack Winters, alerted the Board of Directors that he had been questioned by several members of the Commission as to the Academy's position on whether an "upper or lower mouthguard" was recommended or if the two were interchangeable. It was noted that athletes were using mandibular guards as they felt that this made speech and breathing more agreeable. Dr. Winters requested that the board of the ASD amend the position statement on the properly fitted mouthguard to clarify the best practice for a mouthguard. The following statement was introduced and accepted: Under the section "Dental Status That Considers" line "f" was added and reads "Jaw Relationships (Protecting the most anterior dental arch)." As the majority of individual's most anterior arch is the maxillary arch (where the vast majority of dental injuries occur), an upper guard would be recommended. In the case of "underbites" a mandibular guard would more appropriately be used. This statement was reviewed and passed at the Nov 19, 2011 Board Meeting. The full text of the Position Statement is available on the Academy's web site.

Connect directly with members of the Board of the Academy

Starting in December of 2011 at least one member of the Board of Directors of the Academy for Sports Dentistry will be regularly monitoring the postings to the "Forums" section of the Web Site. This section is a great way to interact with the whole membership of the ASD and now it is also the easiest and most direct way to connect to our leadership. To access the Forum section, members must log in as members and go to the list titled "Team Dentist Community" and click on "Forums." This is an underutilized member benefit and hopefully this will encourage members to interact in a useful and creative way. The coverage will be by at least one board member for every month.

Bylaws changes

In accordance with the constitution of the Academy for Sports Dentistry all changes to the constitution and bylaws must be published in the official publication of the ASD (the Newsletter) prior to a vote by the membership at the business meeting at the Annual Symposium. The following changes to the bylaws have been approved by the Board of Directors to be submitted to the membership:

Chapter I, Section 1.B: #7. The designation of "Corporate Membership" will be deleted. Any current "Corporate Members" will continue as such until the close of the 2011-2012 membership cycle. The following and final two items in this section will be renumbered accordingly.

Chapter III, Section 3. President Elect : The following inclusion was added to the final sentence for clarification: "He shall become President *immediately following the end of the current president's term or immediately* upon the death, resignation, or permanent incapacity of the current president."

Chapter V, Section 5. Duties of Standing Committees

A. Executive: The following two sentences added for clarification: "The Executive Committee shall be composed of the President, President Elect, Treasurer, Secretary, and Immediate Past President: These members must all have prior experience as a board member of the board of directors."

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Academy for Sports Dentistry
800-273-1788 (inside the U.S.A.)
217-227-3431 (outside the U.S.A.)

Forty Years of Title IX: Its Significance for Sports Dentists

On June 23, 1972, The Patsy T. Mink Equal Opportunity in Education Act, more commonly known as Title IX of the Education Amendments Act of 1972 was signed into law. As stated by the Women's Sports Foundation "it is a short and simple federal law" named for the Congresswoman who sponsored the law. The law reads:

"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any educational program or activity receiving Federal financial assistance."

Again quoting from the Women's Sports Organization Title IX Primer, "This law applies to educational institutions that receive any federal funds and prohibits discrimination in all educational programs and activities, not just athletics. Athletic programs are considered educational programs and activities. Title IX gives women athletes the right to equal opportunity in sports in educational institutions that receive federal funds, from elementary schools to colleges and universities. While there are few private elementary, middle school, or high schools that receive federal funds, almost all colleges and universities, private and public, receive such funding."

It is important to note, as in an NCAA presentation, that Title IX was not passed to address inequities in athletics. It is anti-discrimination law intended to address civil rights and access to education

The significance of Title IX as it applies to the landscape of sports in the United States cannot be overstated. In 1972, one out of every 27 girls participated in sports. In 2002, that number was one out of 2.5 girls were participating in sports. According to the National Federation of State high

School Associations, in 1971 approximately 7% of all high school athletes were women and in the 2006-2007 school year the percentage had increased to 41%.

In a power point presentation created in 2007 and available through their website, the NCAA notes that of 402,793 total NCAA athletes, 42.8% were females. Also, since the 1988-1989 Academic Year, the number of women's teams had increased by 2292 teams while men's teams increased by 202. The number of women's teams had increased in each of the 25 years before 2007 while men's teams had increased in only six of the ten years from 1997-2007. In 2007 there were 9,280 women's teams; 8,212 men's teams listed with the NCAA.

The significance of the numbers from 25 years prior to 2007 to sports dentistry is important as the Academy for Sports Dentistry was founded in 1983. At that time, the major focus of dentists was the male athlete. Women's ice hockey, with its mandatory mouthguard rules, was just beginning. Women's basketball was not as significant as it is now. Women's field hockey, which has been around for a long time and has a mandatory mouthguard rule, held its first NCAA championship in 1981, and has continued to grow.

The number of our patients who are athletes and who could benefit from protective mouthguards has increased significantly. Injury rates in sports continue to be higher in men but it has been speculated that this may be changing as well. The number of opportunities to connect with sports teams as team dentists has increased. Just as the number of women in dentistry has become equal to men, the number of female athletic coaches, athletic trainers and female athletic directors has increased as well.

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Mouthguard Sensors

Gather Data on Concussions

The connection between the use of mouthguards and the ability to reduce the incidence and severity of concussions in sports has tantalized sports dentists since Jack Stenger first published his articles on this in the mid 1960's. While dentists are generally convinced that there is a link, however slim, the scientific literature isn't nearly definitive enough to convince the medical community nor many dentists.

Now however, athletic mouthguards are playing a critical role in the ongoing study of concussions. The Bite Tech Company of Greenwich, CT. and X2 Impact Company of Seattle, WA. Have partnered to create an athletic mouthguard that contains a sensor that wirelessly transmits data continuously to a sideline receiver. The information gathered is unique as the sensors can measure both linear and rotational forces. According to Lauren Jones of Bite Tech, the variables gathered are Peak linear acceleration, Peak rotational acceleration, the waveforms of both the linear and rotational acceleration and the direction of the impact in a scrolling time sequence. A proprietary algorithm estimates the forces felt by the brain based on what the mouthpiece records.

X2 Impact is responsible for the electronic sensor technology and a good deal of the data collection. Bite Tech is creating the mouthguards themselves and is marketing the product that includes the guards and the data collection hardware and software. According to Bite Tech, they set up beta testing sites at the football programs of the University of Washington, Notre Dame, and the University of North Carolina. The Stanford School of

Medicine is currently conducting Independent testing of the product. The Stanford group is planning to expand their testing to women's lacrosse and hockey.

Sensors have been constructed previously in football helmets and chinstraps. The mouthguards, according to Dr. Monroe Elkin of Bite Tech, have the advantage over the other two due to its intimate connection with the cranium. Helmets and chinstraps can slide around on the head and chin in use making the data inexact. A well-fitted mouthguard that stays securely in place moves with the cranium with very little independent movement. The data collected from the guard is very closely correlated with the head. The guards used at the beta testing sites and Stanford were custom fitted and fabricated at the Bite Tech Labs in Florida. In the future, however, the guards being marketed will be a heat and form product using the "Vistamaxx" material formerly used by CustmBite mouthguards. According to Lauren Jones of Bite Tech, "This version has allowed us to cut our costs dramatically and the size of the mouthguard to facilitate fit, comfort and diction."

It should be made clear that this technology as it stands now is not to be used to diagnose concussions. According to Jones, "our system in no way provides a diagnosis of concussion. It strictly gives medical professionals objective information on impact so that they may make better/more informed decisions about whether to allow a player to continue in a game after an impact has occurred." There is an "app" which is part of the system that can help to assess a player after a hit has occurred. Again from Ms. Jones, "one part of our system that aids in

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Forty Years of Title IX: Its Significance for Sports Dentists

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Title IX is indeed a landmark for women in sports but it does not mean that everyone views it as a positive piece of legislation. In fact the law has been challenged in the courts several times but actions in response to these challenges have sought to strengthen the intent of the legislation. For example, The Civil Rights Restoration Act of 1988 was passed in response to the Supreme Court's 1984 ruling *Grove City College v. Bell*¹ in which the Court held that Title IX applied only to those programs receiving direct financial aid.

Supporters of Title IX are especially sensitive to criticisms which claim that Title IX increases opportunities for women but at the same time, usually due to funding, removes teams for men (eg. wrestling teams). Criticisms such as these are thought to be unfair, effectively pitting one discriminated group against another victim group. The purpose of the law is equality for everyone in total and it is up to educational institutions that they achieve this however they can.

The Annual Symposium of the Academy for Sports Dentistry this June in Minneapolis, MN will coincide exactly with the 40th anniversary of the signing of the law. The role of women in sports will be a highlight of the program. This is extremely fitting as the importance of Title IX cannot be overstated.

More information on title IX can be found at the websites of the Women's Sports Foundation (www.womenssportsfoundation.org), and the NCAA (www.ncaa.org).

¹. "The Oyez Project, *Grove City College v. Bell*", 465 U.S. 555 (1984).



Mouthguard Sensors

Continued from previous page

evaluation of a player is in the Sideline Assessment application. Once a player receives an impact that a trainer deems worthy of further evaluation, the trainer can click on the sideline assessment application. This sideline assessment app is based off of the NFL SCAT 2 test. It allows the trainer to make this assessment in a convenient and time efficient way. However, if the trainer would rather use another tool that they prefer over the assessment app, they are free to do that as well."

In an October 12, 2011 article by Courtney Humphries, noted concussion expert, Robert Cantu, weighed in on the sensors. Dr. Cantu codirects the Center for the Study of Traumatic Encephalopathy at Boston University. "He feels that all impact-sensing technologies have problems explaining the effects that various kinds of impact have on the brain, and no device can accurately predict a concussion. However, he thinks impact-sensing technologies can contribute a great deal of knowledge simply by noting when a blow happens, even if they can't determine the exact location and force. 'It's hugely important to record the number of hits,' he says."

With the use of heat and form mouthguards there is a question as to whether a team dentist will have much of a role with this new technology. After the company launches the product for general purchase, Bite Tech hopes to offer a customizable version. This version will utilize a custom fitted mouthguard. Also, they are considering offering a finder's fee for a dentist who connects his athletic program or team with Bite Tech.

This exciting new technology uses an intimately fitted mouthguard to measure several variables that will hopefully lead to a greater understanding of just what produces a concussion. At the very least it is a much more dynamic way of gaining data in a game situation rather than just using laboratory headform information. For more information go to the Bite Tech website (www.bitetech.com) as well as the X2 Impact (www.x2impact.com) web site or at BTX2Impact.com.

Academy for Sports Dentistry 30th Annual Symposium



June 21-23, 2012

**Minneapolis Marriott City Center
Minneapolis, Minnesota
(800) 266-9432**

There's no place quite like Minneapolis.

It's a city of amazing contrasts and combinations. With beautiful surroundings and plenty to do, Minneapolis is "an exhilarating place to spend a few days," according to the *Kansas City Star*. The one-of-a-kind theater scene sells more theater tickets per capita than any U.S. city, while the city's 22 lakes provide an abundance of year-round activities. A lush green environment combined with contemporary architecture makes the city a unique combination of natural beauty and sophistication. Upscale shopping and sidewalk dining paired with cultural and family activities make the City of Lakes a wonderful place to visit or live.

Experience the remarkable transformation of a re-energized downtown Minneapolis hotel that takes style and service to breathtaking new heights at the Marriott City Center. Enjoy modern conveniences, and newly renovated guestrooms with stunning city views. Located in the heart of downtown, this hotel is connected to shopping, entertainment and business districts through the famed skyway system. Easy access to the Twin Cities' top attractions, including the Metrodome, Target Center, Minneapolis Convention Center, Target Field and the Theatre District, position this classic hotel at the center of it all.



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Highlights will include:

Presentations

Sports and the Athlete –A view from all sides
Mr. Lou Nanne former NHL Hockey Player
and Sports Executive

Dental Trauma
Nestor Cohenca, DDS

Women In Sports
Nicole Lavoie, PhD

Treating the Female Athlete
Joel Boyd, MD

Body Image in Sports/Eating Disorders
Jillian Lampert, PhD, MPH, RD, LD, FAED

The Female Athlete Triad and Energy Deficiency
William Roberts, MD, MS

Hands on Workshops
Mouthguard Fabrication
Splinting
Photography

Social Events
Recognition Luncheon
President's Reception, Silent Auction

Mark your calendars!
This is a meeting that you won't want to miss!

Photos courtesy of Meet Minneapolis