ACADEMY FOR SPORTS DENTISTRY

NEWSLETTER

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Academy for Sports Dentistry

2009 Annual Symposium

May 7-9, 2009
Chicago, Illinois

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Passing the Gavel

Jeffrey Hoy, DDS, FASD

It's hard to believe this is my final newsletter article as President of the Academy for Sports Dentistry. All in all, it's been a good and productive term of office for me. With the support of the Academy's Board of Directors as well as the general membership, I was able to implement several programs that will continue to help the Academy grow.

We will be continuing the "Bring-A-Colleague" program which gives cumulative discounts to members bringing non-member guests to our annual symposiums. The non-member guests receive a 10% discount on their registration fee as well. If every member brings just one non-member colleague to the upcoming ASD symposium, our attendance will instantly double. This will be doing a great service, not only for the strength and vitality of the Academy but, also for introducing your colleague to the benefits of the ASD and the fine annual symposiums we put on.

This past weekend I had the privilege of joining two of the Academy's past-presidents, Steve Mills and Mark Roettger, in presenting two full-day "mini versions" of the ASD's Team Dentist course to attendees at the 34th Annual Yankee Dental Congress in Boston. We had several surprise visitors in attendance from a variety of professional sports teams.

The presentations were very well received and we had several attendees join the Academy on the spot. Additionally, much excitement was generated for the upcoming 2009 ASD Symposium to be held May 7 -9 at the Hyatt Regency Hotel Downtown Chicago.

Taking a "mini-version" of the ASD's Team Dentist Course "on the road" to other, non-ASD, venues was the brainchild of Steve Mills which proved very successful and which we plan to continue. The next venue for the course is the Chicago Mid-Winter meeting, which will occur as this newsletter issue is being printed. Steve Mills will be joined by Brett Dorney and Ray Padilla for the presentations. Due to its success so far, we plan to continue the presentation at regional dental meetings across the country. Please contact one of us to present this valuable information at a regional dental meeting you attend. These presentations are a terrific and informative win-win experience for everyone.

As I contemplate "passing the gavel" to our next ASD president, I look forward to one of the brightest jewels in the crown of the Academy, namely the annual symposium. In considering this year's line-up of speakers along with the Chicago location, I think this will prove to be the finest ASD Symposium yet; definitely an event not to be missed.

I look forward to seeing each and every one of you along with meeting your non-member colleagues in Chicago. Also, I look forward to joining the remarkable group of past-presidents who have given such tremendous leadership and guidance to this fine organization.

I thank you for your support and allegiance to the Academy and to me this past year as your president.

Most Sincerely,
Jeffrey P. Hoy, DDS, FASD

Editorial

How Young Is Too Young For a Mouthguard?

Steve Mills, DDS
Editor

I have been very interested in mandatory mouthguard rules ever since 1994 when the Minnesota Interscholastic Athletic Commission mandated mouthguard use for seemingly every contact sport played in high schools in the state. In reality it was for nine sports and the rule was rescinded for many of the sports quickly. However, this was a perfect example of well meaning individuals trying to force athletes to protect themselves.

I am also a pediatric dentist. The most common age for any dental trauma is approximately age eight and for sports injuries generally 13-17. So I treat a lot of injuries. The parents of injured players suddenly have many questions about their child. Should my child wear a mouthguard? Why don't they make everyone wear one so I can get my child to wear it? And finally for those parents whose child hasn't had an injury; is it really necessary to have a mouthguard rule because my child hates them?

So here is the conflict: At what age should children start wearing mouthguards and at what age should mouthguard mandates be considered? Put another way, when do athletes really need mouthguards? The mere consideration of this as an issue goes against my natural pediatric dentist's inclination to prevent all preventable dental problems like sports injuries. However, since most kids would rather not wear any type of mouthguard if given the choice, do we really need them?

A large study of Texas youth soccer players published in *Pediatric Dentistry* by Shulman in 1999 demonstrated an extremely low rate of injury for under twelve year olds. Studies of high school aged soccer players seem to show a much more significant injury rate.

USA Hockey, the organization leading the majority of youth ice hockey in the US, mandates mouthguards for most of their youth level players but recently has removed the mandate for both boys and girls who are playing at levels under ten years of age. The justification for this was that essentially no injuries were reported in this age group.

A large study from Little League Baseball published in the *Physician and Sports Medicine* in 2001 by Mueller, et al, reported significant number of injuries to teeth. Little Leaguers are predominantly under twelve years of age and 80% of all ball related injuries were to the face and teeth. Twenty one percent of ball related injuries were to the teeth and 15.5% of all injuries were to the teeth.

Young people change constantly until full permanent post orthodontic dentition is reached. They don't get injured often in many early age organized sports (as opposed to unorganized play). Custom fitted mouthguards are often expensive and don't last long in the transitional dentition. Store bought mouthguards are difficult to fit, most don't fit well and kids don't really like them. Can't parents just skip them until their kids are older?

As an opposing thought I have spoken to many high school and college coaches over the years who are involved in sports such as soccer and basketball where mouthguard use for the most part is not required. Often when mouthguard rules are suggested, the coaches say that they would like to see kids made to wear them at young ages so that when they reach the more competitive levels they are use to a mouthguard. Then they, the athletes, wouldn't complain about them as much.

So there it is. Do you start players young so that they grow up with a mouthguard? Or, do you avoid them at young ages because they are hard to fit, can be expensive, and are not really all that necessary to protect against organized sport injuries? This has been a dilemma for me as I have always seen the

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Editorial *continued from page 3*

benefit of mouthguards and have made them for my own children throughout their youth sports careers.

How do I now address this for my elementary school patients and their parents? I do it as I would any dental situation whether it be caries risk or risk of injury. I mentally construct a risk assessment for each child and sport. If a child is playing an unprotected sport (such as basketball), has a history of injury, and has a dental characteristic (such as a large overjet which predisposes them to trauma) I would strongly recommend mouth protection. If a young child is playing a helmeted sport with face protection like youth hockey at a beginner's level, which is not meant to have much contact, I could easily tell a parent that a mouthguard isn't a huge need.

The bottom line continues to be twofold. We want our recommendations to be based on evidence, and we want to prevent preventable injuries. If the evidence does not show a need then it is not critical to protect against a potentially random occurrence. But parents must realize that there is always a risk of injury and that dental injuries are often permanent.

I am a mouthguard guy. I see injuries more or less daily and I cringe when I think they could have been prevented. If the circumstance dictate it I recommend a mouthguard at a very young age (not usually primary teeth). But I don't want anyone to ignore any data which suggests that the need for certain age groups in certain sports is low so that organizational policies can't make sense.

The effects of mouthpiece use during endurance exercise on lactate and cortisol levels.

Garner DP*, McDivitt E (The Citadel, Charleston, SC)

Protective mouthpieces have been used in a variety of sports to decrease the risk of orofacial injury. However, there is limited research on the physiological effects of mouthpiece use during exercise.

PURPOSE: To investigate the possible effect on lactate and cortisol levels when wearing and not wearing a mouthpiece, the wEdge (Bite-Tech Corp).

METHODS: Subjects (n=24), age 18-24, ran at 75 -85% of their maximal heart rate for 30 minutes on 2 separate trials, being randomly assigned the use of the mouthpiece on 1 of the 2 trials. Lactate levels were assessed before, 15 and 30 minutes during, and post 10 minutes exercise. Subjects provided a passive drool sample before and after each exercise bout to assess salivary cortisol levels.

RESULTS: Lactate data indicated a significant difference between wearing and not wearing the mouthpiece at 30 minutes exercise (p-value = 0.024). Mean cortisol levels showed no significant difference between wearing and not wearing the mouthpiece (p-value= 0.111). However, there was a trend towards lower mean cortisol levels with use of the mouthpiece (0.1484 ug/dL) versus no mouthpiece (0.2201 ug/dL).

CONCLUSION: This study suggests that use of a mouthpiece may reduce lactate and cortisol increases and thereby improve exercise performance.

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, LMills5977@aol.com.

Academy for Sports Dentistry

Symposium 2009 Program

Thursday, May 7, 2009

7:30 am – 8:15 am	Registration/Exhibits/Continental Breakfast
8:15 am – 8:30 am	Welcome/Opening remarks Jeffrey Hoy, DDS / Paul Nativi, DMD
8:30 am – 11:30 am	Treatment of Dental Trauma Guidelines Anthony J. DiAngelis, DMD, MPH
11:45 am – 1:45 pm	Recognition Luncheon
2:00 pm- 3:00 pm	Oral Presentations/Poster Presentations Moderator: Jim Lovelace, DDS
3:00 pm- 3:45 pm	On Field Management of Suspected Cervical Spine and Head Injuries Charles Bush-Joseph, MD Moderator: Jim Lovelace, DDS
3:45 pm- 4:15 pm	Exhibits/Breaks/Silent Auction
4:15 pm- 4:50pm	Management of the Collapsed Athlete George Chiampas, DO Moderator: Jim Lovelace, DDS
4:50 pm - 5:30 pm	Concussion Assessment and Management On and Off the Field Cherise Russo, DO Moderator: Jim Lovelace, DDS
5:30 pm	Adjourn

Friday, May 8, 2009

7:15 am – 8:15 am	Registration/Exhibits/ Continental Breakfast Silent Auction Bidding
8:15 am – 8:30 am	Call to Order Jeffrey Hoy, DDS
8:30 am -11:45 am	ASD Mouthguard Forum Defining the Ideal Mouthguard
8:30 am – 8:40 am	Moderator: Stephen Mills, DDS Introduction
8:40 am – 9:10 am	Tomotaka Takeda, DDS, PhD
9:10 am – 9:30 am	Mark Roettger, DDS
9:30 am – 9:50 am	Trent Gould, PhD, ATC
9:50 am – 10:20 am	Exhibits/Breaks/Silent Auction Bids
10:20 am – 10:40 am	Gerald Maher, DMD
10:40 am – 11:00 am	Jack Winters, DDS
11:00 am – 11:20 am	Cynthia Satko, DDS, MS
11:20 am – 11:40 am	Ray Padilla, DDS
11:40 am- 12:15 pm	Box Lunch pick up
12:15 pm – 1:45 pm	Panel Q&A / Discussion
2:00 pm – 3:30 pm	TMJ Tx Guidelines AACP Speaker: Terry Bennett, DMD Moderator: Paul Nativi, DMD
3:30 pm- 4:00 pm	Break/Exhibit/Auction
4:00 pm – 5:30 pm	Assessment and Management of Sports-related Concussion Ruben Echemendia, Ph.D. Moderator: Paul Nativi, DMD
6:30 pm –9:30 pm	President's Reception/Silent Auction Hyatt Regency Hotel

Saturday, May 9, 2009

7:30 am – 8:30 am	Registration/Exhibits/Continental Breakfast
8:15 am – 8:30 am	Call to Order Paul Nativi, DMD
8:30 am- 9:30am	Annual Business Meeting
9:30 am – 10:30 am	Advanced Suture Lecture "Lips & Layers" Chester F. Griffiths, MD, FACS
10:30 am- 11:00 am	Exhibits/Breaks
11:00 am- 12:30 pm	Suture Workshop: "Lips & Layers" (Limited to the first 100 registrants) Chester F. Griffiths, MD, FACS
12:30 pm – 12:45 pm	Closing Remarks Paul Nativi, DMD
12:45 pm	Adjourn
1:30 pm – 3:30 pm	Mouthguard Workshop (50 max) Ray Padilla, DDS

Statement on Athletic Mouthguards

ADA Council on Access, Prevention and Interprofessional Relations
ADA Council on Scientific Affairs

Editor's Note: Following is the ADA Statement on Athletic Mouthguards, which is printed with the permission of the American Dental Association. Following the statement is an open letter to the ADA from ASD member Dr. Ray Padilla.

The Councils recognize that dental injuries are common in collision or contact sports and recreational activities.[1] Numerous surveys of sports-related dental injuries have documented that participants of all ages, genders and skill levels are at risk of sustaining dental injuries in sporting activities, including organized and unorganized sports at both recreational and competitive levels.[1-3] While collision and contact sports, such as boxing, have inherent injury risks, dental injuries are also prevalent in non-contact activities and exercises, such as gymnastics and skating.[1,3,4]

The Councils promote the importance of safety in maintaining oral health and the use of a properly fitted mouthguard as the best available protective device for reducing the incidence and severity of sports-related dental injuries. The Councils are committed to oral health promotion and injury prevention for sports participants.

Surveillance studies of mouthguard users and nonusers have consistently shown that mouthguards offer significant protection against sports-related injuries to the teeth and soft tissues. Mouthguards provide a resilient, protective surface to distribute and dissipate forces on impact, thereby minimizing the severity of traumatic injury to the hard or soft tissues.

According to a 2007 meta-analysis of studies evaluating the effectiveness of mouthguards in reducing injuries, the overall injury risk was found to be 1.6-1.9 times greater when a mouthguard was not worn, relative to when mouthguards were used during athletic activity.[2] Another study of collegiate basketball teams found that athletes wearing custom-made mouthguards sustained significantly fewer dental injuries than those who did not.[5]

For sporting activities that are inherently contact-oriented (e.g., football), orofacial protectors or faceguards are also appropriate for added safety and protection. The ADA has endorsed the preventive value of orofacial protectors, including helmets, faceguards and mouth protectors, for use by participants in sporting and recreational activities with some degree of injury risk and at all levels of competition.[6]

Dentists are encouraged to ask patients if they participate in team sports or other activities with risks of injury to the teeth, jaw and oral soft tissues (mouth, lip, tongue, or inner lining of the cheeks). The Councils recommend that people of all ages use a properly fitted mouthguard in any sporting or recreational activity that may pose a risk of injury. The Councils also recommend educating patients about mouthguards and orofacial injury risks, including appropriate guidance on mouthguard types, their protective properties, costs and benefits.[6] The key educational message is that the best mouthguard is one that is utilized during sport activities. While custom mouthguards are considered by many to be the most protective option, other mouthguards can be effective if they fit well, are worn properly and stay in place.

Further research is encouraged to strengthen the evidence base addressing the effectiveness of available mouthguard types and intervention programs for reducing the incidence and severity of dental injuries. The Councils will continue to monitor developments in this field to keep its recommendations consistent with current scientific information.

References

1 *ADA Council on Access, Prevention and Interprofessional Relations; ADA Council on Scientific Affairs. Using mouthguards to reduce the incidence and severity of sports-related oral injuries. JADA 2006; 137(12): 1712-1720.*

2 *Knapik JJ, Marshall SW, Lee RB, Darakjy SS, Jones SB, Mitchener TA; delaCruz GG, Jones BH. Mouthguards in sport activities: history, physical properties and injury prevention effectiveness. Sports Medicine 2007;37(2): 117-144.*

3 *Kumamoto DP, Maeda Y. A literature review of sports-related orofacial trauma. Gen Dent 2004 May-Jun;52(3):270-80.*

4 *Fasciglione D, Persic R, Pohl Y, Filippi A. Dental injuries in inline skating - level of information and prevention. Dental Traumatology 2007 Jun; 23(3),143–148.*

5 *Labella CR, Smith BW, Sigurdsson A. Effect of mouthguards on dental injuries and concussions in college basketball. Med Sci Sports Exerc 2002; 34(1):41-4.*

6 *American Dental Association, Policy Statement on Orofacial Protectors. Transactions, 1995, p. 613.*

Open Letter to ADA

From: Ray Padilla, DDS
To: Stoufflet, Nicole
Subject: ADA Mouthguard Position Statement

Nicole M. Stoufflet, RDH, MHS
e-mail: stoufflетn@ada.org

Dear ADA,

I recently received an e-mail message from Dr. Jeff Hoy (president of the Academy for Sports Dentistry) concerning the proposed mouthguard statement from the ADA.

May I preface this letter by saying I have always supported organized dentistry and support the ADA and the California Dental Association (CDA) being on the Council on Community Health for the CDA for several years in the past. I have been lecturing for organized dentistry for the past twenty years on injury prevention and athletic mouthguards. However, I have been very disappointed with past and present ADA statements concerning athletic mouthguards and injury prevention for children and athletes.

It is my opinion that the ADA does not fairly support their constituent dentist members when the ADA statement does not follow the guidelines of recent literature reviews. By not making statements supporting custom made mouthguards made by the dentist, and by not stating that it is unacceptable to wear over the counter mouthguards, you are giving our patients the directive and permission to go to a sporting goods store for their preventive dentistry. Searching literature reviews, I have not found one peer review paper since 1980 that supports stock, or boil and bite over the counter mouthguards. In fact papers and peer reviewed references we (Dr. Hoy and I) have sent you state that wearing over the counter mouthguards are the same or similar to wearing no mouthguard at all. Statements from organized dentistry in Australia, New Zealand, as well as papers and documentation from UK, Canada, Germany and Japan state that the only mouthguards that should be worn are those made by a dentist. These countries and organizations truly support their member dentists and advise patients to seek their dentistry from licensed professionals. In my travels of lecturing in Australia, Canada, Spain, Mexico, Greece, Germany, Switzerland, and Japan, I am often asked why our ADA does not support their dentists in this issue and make sound statements in the best interests of patients as these other countries have done. It makes us look bad and behind the times. I do not have an answer for them.

I beg and urge you to reconsider your broad statement that does not truly state that patients should not seek their dentistry from sporting goods stores. Solely stating to wear a mouthguard is not enough. We need to be more specific. The Australia Dental Association states “Mouthguards made on other than a model of the mouth are unacceptable. The dangers if inhalation and the disadvantages of non retention, allied to the possibility of single tooth contact, disqualify such devices as effective protection.” This statement was made in 1996 and continues to be their statement. We are twelve years behind the times.

I have treated many patients that have become injured while wearing these over the counter mouthpieces. It breaks my heart when a ten year old new patient enters my practice with an avulsion, luxation or fracture injury to their front anterior teeth that I know could have been prevented with the proper protection and education. They are now dental cripples for the rest of their lives. We are doing our patients a disservice when we do not keep up with proven modern dentistry. It breaks my heart when I see advertisements from mouthguard companies that state “We are taking the money that dentists have been raking in and placing it in the sporting goods stores where it belongs.” This is a disgrace.

I urge you to reconsider your statement and consider the advice of the Academy for Sports Dentistry and literature review.

Respectfully,

Ray R. Padilla, DDS, FASD, FPFA
14650 Aviation Blvd., Suite 150
Hawthorne, CA 90250

Team Dentist Course

Debuts At the Yankee Dental Congress

Pictured Above: *(left to right) Dr. Jeffrey Hoy, current president of ASD, Stephen Mills, Mark Roettger, Tom Dodson (oral-maxillofacial surgeon for the Boston Bruin Hockey team).*

Pictured Below: *Dr. Jeffrey Hoy, shows his Los Angeles Lakers Championship ring to Mark Roettger and interested audience members.*

The Yankee Dental Congress in Boston, Massachusetts, featured the Team Dentist Course of the Academy for Sports Dentistry at its January 28-31, 2009 meeting. This marked the first time that this course has been presented outside of the Annual Symposium of the Academy. The course was presented by a team including current president, Jeffrey Hoy, and past presidents Mark Roettger and Stephen Mills. It was titled "Major League Sports Dentistry: The Essentials of the Team Dentist Course of the Academy for Sports Dentistry."

The Team Dentist Course was first presented at the 2003 Annual Session in San Juan, Puerto Rico. Created by Dr. Enrique Amy, the Team Dentist Course was modeled after team physician courses held by both the International Federation of Sports Medicine (FIMS) and the American College of Sports Medicine (ACSM). It is designed to be a one day comprehensive overview of Sports Dentistry which would be useful for someone new to the area and equally valuable to those of individuals who take care of a specific team and want to keep up with all facets of high level sports coverage.

Many of our members speak at various meeting across the country trying to spread the word about sports dentistry but this course is unique in its focus and approach to the subject. It is meant to make sports dentistry very real and useable for those dental personnel who wish to move beyond their office and to become more intimately involved with a specific team, school or club. At the same time, the course is very valuable to the neophyte to the world of sports dentistry as it is very comprehensive.

The course was also intended to create awareness of our organization and to recruit new members. The team teaching concept allows an audience to listen to several dentists with slightly different points of view. In this case Dr. Hoy has vast experience with high level professional athletes and advanced medical teams, Dr. Roettger has been involved with major college athletics, high schools, and professional athletes and Dr. Mills works with local small colleges and high schools. This gives the course a broad based appeal to a variety of convention attendees.

The course is designed to be a full day learning experience from which the attendee could receive a certificate of completion. The reality of large dental conventions is that they do not structure their time to allow for eight hour courses, therefore this presentation was cut to 2 two and one half hour sessions presented in the morning and afternoon. No certificate was issued. The course was then termed "The Essentials of the Academy for Sports Dentistry's Team Dentist Course" and sections such as oral cancer, pharmacology, doping, and first response readiness were covered only superficially.

Hopefully this exposure will result in the course being presented in other venues and that the ASD will gain from the presence at large meetings. If anyone is interested in presenting the course, it must first be screened for content so that the messages presented don't conflict with the primary messages of the Academy. For this reason, the Team Dentist Course can only be presented with specific permission from the Board of Directors of the Academy.

While Drs. Hoy, Roettger and Mills enjoyed the experience, the course can be presented by many members of the Academy and the initial intent was to use local dentists to present at their own regional meetings. It was also hoped that this could be an income generating vehicle for the Academy but in reality, with three presenters, the honorarium covered little more than expenses.

For more information on the Team Dentist Course for anyone interested in having this experience for their own organization or meeting please contact Shelly Lott at sportsdentistry@consolidated.net.