

# Guest Editorial

## Staying Current with Trauma Treatment

Treating children with acutely injured teeth, I think, is one of the most challenging parts of a pediatric dental practice. For one thing, these patients usually present on emergency in the midst of a busy day or outside of normal office hours. We have to extricate ourselves from the patients we're scheduled to treat (or from bed), get an accurate diagnosis, rule out other systemic injuries, and provide some treatment. Some dental injuries require immediate care and, as we may not see trauma patients on a regular basis, it's easy to get confused about what the latest guidelines recommend for a specific injury. Complicating this is the fact that many of the recommended procedures to treat dental injuries today are not evidence-based. The many possible combinations of fractures and luxations make for a difficult diagnostic process, and treatment choices are equally confounding. So when that crying 7 year old shows up on a frantic day with one incisor fractured exposing the pulp and another intruded 5 mm, it can be a real challenge determining the best treatment.

A neat web-based program is now available which should help clear the fog around managing dental trauma. It's called the *Dental Trauma Guide* and is found at "www.dentaltraumaguide.org". Developed by the world renowned traumatologist, Dr. Jens Ove Andreasen and his research group at the University Hospital of Copenhagen, the goal of the *Dental Trauma Guide* is to raise the standard of care for patients with dental injuries worldwide. The program is accurate, accessible and affordable. So affordable, in fact, it's free!

The *Dental Trauma Guide* presents the most current trauma guidelines published by the International Association for Dental Traumatology (IADT) in a graphical, interactive format and enhances them with long-term prognosis estimations for a multitude of injuries affecting both the primary and permanent dentitions. An excellent example is the diagnosis and management of a laterally luxated permanent tooth. The site shows a clinical image of a lingually luxated tooth and graphically demonstrates how to reposition the tooth both digitally and with forceps. In appropriate detail, it lists the splinting options, duration, and follow-up procedures. Another great example is management of a crown fracture with an exposed pulp. The injury is portrayed with graphic images and

radiographs. An "etiology" segment demonstrates the crown being fractured and the resultant damage to tooth structures. Treatment options include both pulp capping and partial pulpotomy with detailed descriptions of the techniques.

There are a number of ways to approach the *Dental Trauma Guide* for information. The "Patient Examination" section of the site summarizes the sequence and steps of a thorough clinical and radiographic exam. This is familiar information for a pediatric dentist but may not be for dentists unaccustomed to treating dental injuries, so it's a good starting point for them. The "Trauma Pathfinder" leads the clinician down a diagnostic pathway following clinical findings to the injury at hand. The user can also directly choose the primary diagnosis and be directed to the appropriate treatment guidelines.

One of the most interesting aspects of the site is the information provided on prognosis of the injured tooth. An example is the management of a pulp exposure in a permanent tooth. After the clinician selects the corresponding stage of root development, graphical data are presented that depict the prognosis for pulp necrosis, root resorption, marginal bone loss and tooth loss. Admittedly, much of this data is preliminary, but the framework is there to add data as it becomes available, and the developers are committed to doing so. Indeed, new statistical information to include 95% confidence intervals for prognosis estimations will be included in the *Dental Trauma Guide* during 2011.

Another valuable feature of the program is the inclusion of key references for each type of injury covered. The developers hope to make these papers available by direct download of PDF files, but just noting them provides credibility to the site's recommendations and enhances the program's value as a learning and teaching tool.

The developers have targeted this program to a broad audience encompassing dental students as well as dental specialists from all fields. Future plans for dental students include a flash game that will test students' knowledge in an interesting and clinically relevant format. Another upcoming feature is an "intelligent" trauma record which will prompt the clinician to collect the correct

diagnostic information for any given dental injury. This information will be validated with logic crosschecks and the end result will be a PDF file that can be printed and included in the patient's record or attached as a document in an electronic record system.

Admittedly, this site is a work in progress and always will be. Even as the developers and their many collaborators from multiple specialties continue to add content, the evidence will change and so will this program. For example, the IADT guidelines for primary dentition injuries are currently being revised so that portion of the website is not available but will be added when the revisions are complete. This dynamic feature only adds to the beauty of this teaching tool, and this is the model that our current textbooks should follow. The time from final draft of a traditional textbook chapter to publication can be counted in years, and information is often outdated by the time it hits the streets. This online, immediately accessible and scientifically current method of information transfer clearly is the way of the future.

The initial development of the *Dental Trauma Guide* was supported by grants from a host of foundations and associations. Future versions will need further grant support, and a plan is in the works to provide additional features on a subscription basis. The developers hope to

keep the most fundamental information on this site free to all users, yet the care and upkeep of such a project is expensive, and continual financial support is needed. As you do, over the course of a year I write a number of checks to organizations and charities, and I sometimes wonder if they truly deliver the services that they claim. I have no question, however, about the value of this program. It has improved the quality of my patient care and my teaching of dental trauma. If you think this site is worthwhile, then do what I did and make a contribution to the program. It's easy to do by following the link to "Donate" on the home page of "dentaltraumaguide.org".

The management of dental trauma crosses the scope of practice of all dental specialties, and we frequently collaborate with those colleagues and general practitioners in the treatment of our patients. The availability of this site provides an excellent platform to calibrate our combined treatment and enhance our communication. It's great information and fun to use. Log on now and you'll see what I mean!

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### **Senior Vice President/ Research and Policy Center Director**

The American Academy of Pediatric Dentistry (AAPD) is seeking an individual with extensive policy analysis and health services research experience to direct the new AAPD Pediatric Oral Health Research and Policy Center. The Director is responsible for directing the center's research and analytical activities related to public policy issues impacting children's oral health care. The Director will report directly to the AAPD's Chief Executive Officer and COO and General Counsel. The center will be housed at the headquarters office of the AAPD in Chicago.

The Director will oversee, conduct and promote health policy research that advances children's oral health issues and supports AAPD public policy and public awareness initiatives at the national, state, local, and international levels with legislatures, government agencies, professional associations, and other non-governmental organizations. The Director will actively pursue grant and contract opportunities from various sources such as government agencies, charitable foundations, and other appropriate project underwriters. The Director will be responsible for monitoring state, national and international data concerning the oral health status of children, and will provide technical assistance to governmental agencies, associations, state dental organizations and other organizations preparing reports concerning children's oral health.

#### **Supervision and Guidance**

The Director will supervise the Health Policy Center Assistant Director, and work under the supervision and guidance of the Chief Executive Officer and COO/General Counsel.

#### **Qualifications**

The ideal candidate will have a minimum of ten years experience in an association, governmental, or university position related to children's oral health policy and health services research. A dental degree and/or a doctoral level degree, ideally in children's oral health policy, or in the health sciences or related areas is required.

The AAPD offers competitive salaries, excellent benefits, and is an equal opportunity employer. E-mail cover letter, C.V., salary requirements, and references to: [slitch@aapd.org](mailto:slitch@aapd.org).

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