



Odontology Section – 2006

F39 Extraoral Skull Films Used to Age Dental Injury

John D. McDowell, DDS, MS, University of Colorado School of Dentistry, PO Box 6508 Mail Stop F844, Room 130, Aurora, CO 80045*

After attending this presentation, attendees will be able to: 1. List the commonly used imaging modalities to assess maxillofacial injuries, 2. List the radiographic features used to age maxillofacial injuries, 3. List the changes to the dental pulpal structures that can be used to differentiate between recent and distant trauma.

This presentation will provide understanding of the changes that might occur in the hard tissues of the maxillofacial useful in aging dental/maxillofacial injuries.

Victims of significant oral and maxillofacial trauma are often evaluated, stabilized and treated in the emergency department prior to definitive treatment by dentists. Depending on the severity and location of the injuries, health care providers will choose between a number of different imaging modalities. In the emergency department, flat plane extraoral skull films are often used to assess injuries to the maxillofacial complex. When indicated, flat plan radiography can be supplemented with computed tomography and magnetic resonance imaging to develop a final diagnosis regarding hard and soft tissue injuries. Although skull films are rapidly available and can be invaluable in assessing hard and soft tissue injuries, these extraoral projections are not frequently used to assess trauma to the dentition. A case will be presented wherein skull films were used to diagnose and treat dental and soft tissue injuries resulting from a fight. Following the fight, criminal assault charges were filed against one of the combatants. A trial followed with the author presenting expert witness testimony regarding aging of dental and alveolar injury patterns. This presentation will provide information to the attendee regarding conclusions that can be reasonably gleaned from evaluating skull films and intraoral films and how that information can be conveyed to the trier of fact in either civil or criminal cases.

Aging Maxillofacial Trauma, Internal Pulpal Resorption, Dental and Alveolar Bone Trauma