

South Carolina ENA Newsletter

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3RD QUARTER

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Notes from Our President

Hi everyone!! Hope this finds your summer going well and you're trying to stay cool! I am excited to announce our new look for the website!! Please take a moment and check it out at <http://www.sc-ena.org>. We are still in the process of loading information. Also very happy to announce the Pee Dee Chapter!! I am happy to have them back and we wish them luck as they continue to build and recruit new members! I know they are looking for any suggestions for fund raisers so please feel free to reach out to each other. I look forward to seeing some of you in Tampa next month! South Carolina ENA will have a booth in the vendor hall so stop by and see us!





The Ugly Face of Trauma

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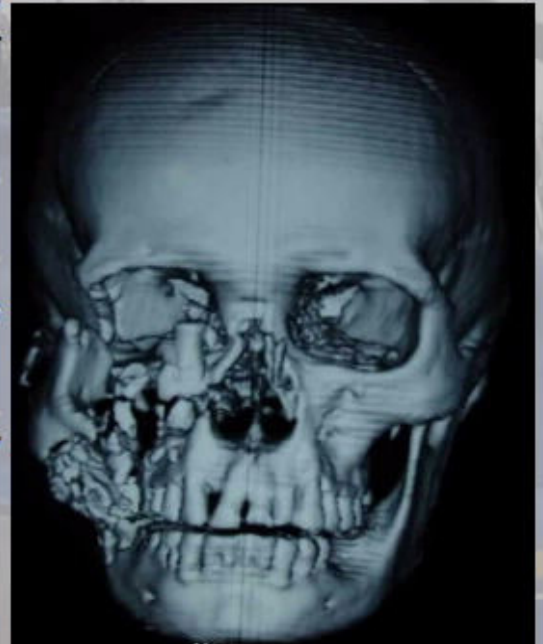
Imagine a hot, sultry, summer afternoon. An older teenage boy has just finished doing some target shooting with his little brother and is cleaning his father's pistol. With meticulous care he cleans each and every part while his little brother of 12 looks on. Living in the country, both of these boys have been raised from a very young age to follow the utmost safety rules and respect the dangerous nature of firearms. This will be no less the case on this afternoon. There is no carelessness. There is no playing around. This particular pistol is kept as a home defense weapon and thereby is always loaded and hidden out of sight in their parent's bedroom. After reloading the pistol, the older brother starts to return it to its hiding place



when it slips out of his hands due to the amount of gun oil he had gotten on them. Hearing a heavy thud the little brother sharply turns his head towards the noise.

He does not hear the gun shot, but does see a cloud of smoke come up from the floor and, almost at the same time, feels the colossal impact of a .357 Magnum bullet as it strikes him in the center of his jaw, snapping his head backwards. The bullet continues through his mouth traumatically separating gums and teeth from the mandible as it passes; splitting the mandible into two separate pieces which will then protrude from his mouth and shattering many of his teeth. His tongue is torn from its connective tissues as the bullet travels on to the posterior aspect of his oral cavity where it perforates the soft pallet, passes on into the soft tissue of the left neck, pierces the left sternocleidomastoid muscle at the level of the 4th cervical vertebra, and finally exits from the left lateral aspect of his neck. The child is briefly knocked unconscious and falls onto his parent's bed. Blood is pouring from his mouth and the wound on his neck. Soon, he will regain consciousness knowing exactly what has happened. He is terrified. He is in pain. He is dying, and he knows it.

Caring for facial trauma patients is one of the most difficult types of emergencies for many providers both pre-hospital as well as in hospital. From a technical stand point, the patient's anatomy may be severely displaced or even missing. Many times these patients are conscious and aware of what is happening to them, but due to the nature of their injury are not able to speak or even possibly hear. In addition to the facial trauma there may have been enough force absorbed to cause trauma to the brain, airway, cervical spine, or greater vessels of the neck. There is also a strong emotional factor to contend with as these injuries take their toll on the patient, the patient's family, and the provider. Someone's "person" is so often connected to their facial appearance and a traumatic event can forever alter their self image as well as their acceptance by others thus causing anxiety and fear about life after the injury. The horror of seeing a human face mutilated beyond recognition may cause emotional difficulty for a provider while attempting to care for this patient. Many of these issues often compound and can make for a very difficult patient to care for. As we explore facial trauma in this article, reflect on the patient described in the example at the start of this article, as well as personal experience while evaluating the following questions: What are the immediate life threatening concerns and what would be your plan of action to rectify those issues? What are the potential problems you might encounter while trying to deliver care to this patient? Could there be any ongoing issues as this patient recovers that you may be called at a later time to care for? How would you communicate to this patient? What could your transport decisions be influenced by? By answering these questions now it is possible to alleviate some of the difficulty in caring for a patient with severe facial trauma.



Facial trauma is the result of blunt trauma and/or penetrating forces applied to one or more of the three regions of the face; the upper face, the lower face, and the maxillofacial region. Automobile accidents, sports, violent crimes, and falls are most often the cause of facial trauma and the etiology and frequency of occurrence vary by geographical region. So, while it is unlikely that severe facial trauma caused by a hockey stick would be a predominate reason for a trip to the trauma center in this region, it is common for severe facial trauma to occur during motorcycle collisions due to infrequent use of helmets.

Facial trauma can range from simple soft tissue injuries to complex fractures. In the United States, there are approximately 3 million incidents of patients suffering facial trauma each year with a resulting average of less than 1% being severe enough to be treated by a pre-hospital professional. (Steve Lee, 2009) However, a recent study shows that 50% of all maxillofacial trauma patients also suffered from multi-system trauma. (Tania Parsa, 2010). A significant number of facial traumas are caused by some type of blunt force. This blunt force can be divided into two categories; High Impact and Low Impact with the separation being made by either the force being greater than or less than 50 times the force of gravity, or "G"s. Fractures to the supraorbital rim, mandible, or frontal bones of the skull are only caused by High Impact forces. (Tania Parsa, 2010)



Our first and foremost consideration while caring for a patient with severe facial trauma is the status of the patient's airway (Steve Lee, 2009). Many times in the event of severe facial trauma, a foreign body obstruction is possible. Bone, teeth, and blood would be at the top of the list of possible obstructing bodies, but also the tongue if its supporting structures and/or nervous control have been compromised. Controlling an airway that potentially has indiscernible anatomy as a result of displacement or destruction of tissue, has a loss of supporting structures, or is filled with foreign material may require the use of special adjuncts or techniques such as a Bougie Airway Introducer, Glidescope Airway Camera, Rapid Sequence Induction, or Surgical Cricothyrotomy. Nasotracheal intubation should be approached with great care as there is a significant risk of a nasotracheal intubation becoming a nasocranial intubation secondary to a compromised basilar skull. However, in some facial trauma situations where the patient has a large amount of oral trauma or oral swelling (such as our patient described at the beginning of this article), nasotracheal intubation may be the best option. Unfortunately, the availability of many of these tools and techniques vary from region to region, so at times the most effective way to keep the patient's airway open is to remove any foreign material by suction or direct manipulation with Magill forceps and then positioning the patient so that any blood or vomitus will drain from the pts mouth and away from the airway by gravity. Many facial trauma patients will have swallowed blood either voluntarily or involuntarily, so vomiting should be anticipated by the provider and, in both situations, care of the C-spine must be considered. Transport options of a patient suffering with facial trauma vary dependent on the severity of the injury. A bar room brawl that results in a black eye may very well not even

require transport to an emergency department, but should that black eye be as a result of being hit with a baseball bat, then this would be an important factor in making a transport decision. Over all, most facial traumas are not life threatening, but the presence of a significant facial trauma may be an indicator of another underlying and more serious trauma. For this reason any patient with significant facial trauma may be best seen at a Trauma Center where there will be other specialties available to that patient should there be any complications or occult trauma discovered.

Facial trauma patients may be some of the most disturbing a pre-hospital or in-hospital provider may care for. Having a crew care for a child or particularly difficult patient with facial trauma could be very mentally disturbing to even seasoned providers. Activation of a CISM (Critical Incident Stress Management) debriefing could be very beneficial in helping those providers recover from these types of situations or may identify someone who is having significant emotional issues as a result of caring for a patient with severe facial trauma and may need the help of a professional counselor.



Patients with severe facial trauma do not make up a large percentage of emergency medical care cases. Most facial trauma cases, as a whole, are not even seen in a medical facility. However, when a significant facial trauma case presents itself, there will be many players and a very large amount of time that will be

needed to help these patients back to a normal life. From the care they receive in the field all the way to their last visit with their maxillofacial surgeon, competent and compassionate care will help not only the patient heal on the outside, but on the inside as well.

Bibliography:

Spine and Joint Institute of Lake County. (n.d.). http://www.officialspineinstitute.com/articles/upload/Why_G_Forces_Are_Dangerous_docs_teven.pdf. Retrieved 8/4, 2011, from Spine and Joint Institute of Lake County: http://www.officialspineinstitute.com/articles/upload/Why_G_Forces_Are_Dangerous_docs_teven.pdf

Steve Lee, M. (2009, December 29). Facial Soft Tissue Trauma . Retrieved 7/30, 2011, from Medscape Reference : <http://emedicine.medscape.com/article/882081-overview>

Tania Parsa, M. (2010, February 19). Initial Evaluation and Management of Maxillofacial Injuries . Retrieved 7/30, 2011, from MedScape Reference: <http://emedicine.medscape.com/article/434875-overview#showall>

Upcoming FNCC/ENPC Classes:

<p>FNCC-</p> <p><i>Spartanburg 8/23</i></p> <p><i>Greenville 8/25</i></p> <p><i>Myrtle Beach 8/27</i></p> <p><i>Spartanburg 8/27</i></p> <p><i>Greenwood 8/29</i></p> <p><i>West Columbia 9/1</i></p> <p><i>Florence 9/5 (Instructor)</i></p>	<p><i>Charleston 9/27</i></p> <p><i>Georgetown 9/29</i></p> <p><i>Charleston 10/8</i></p> <p><i>Charleston 10/18</i></p> <p><i>Greenville 10/16</i></p> <p><i>Florence 10/22</i></p> <p><i>Charleston 10/25</i></p> <p>ENPC-</p> <p><i>Aiken 8/25</i></p>	<p><i>West Columbia 8/27</i></p> <p><i>Charleston 9/7</i></p> <p><i>Greenville 9/8</i></p> <p><i>Murrells Inlet 9/9</i></p> <p><i>Charleston 10/5</i></p> <p><i>Georgetown 10/14</i> <i>(Instructor)</i></p>
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See you in Tampa!!

Stay Cool.....Avoid the Heat!!!!!!!



*Annual
Conference.....
Education,
Networking,
and lots of
Fun!!!*

Tips to help you keep cool!!

- Drink plenty of fluids- avoid alcohol.*
- Wear light weight, light colored, loose fitting clothing.*
- Never leave anyone or any animals in a closed, parked vehicle.*
- Stay indoors as much as possible.*
- Remember those at greater risk- elderly and children*
- Limit outdoor activities to mornings and evenings.*
- When outside, protect yourself from the sun. Wear hats, sunscreen, and sunglasses.*



*2011 Annual
Conference
Sept. 20-24*

