Pediatric Trauma Society Education Committee Case Report
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T is a 10 year old male injured in a drive by shooting. He was sleeping in his home at the time of the shooting. EMS was called and they arrived at his home 4 minutes after being dispatched. On arrival, they found him walking toward the squad holding a towel to the right side of his face. He was in visible respiratory distress. EMS observed a GSW to the right face and left chest. Initial vitals were: P 138, RR 28 (shallow), BP 152/100, pox 94% RA, GCS 15. They placed him on oxygen. Absent breath sounds were noted on the left and a needle decompression was performed. A Bolin chest seal was placed over the chest wound. IV access was established. He arrived at a Level 1 Pediatric trauma center 10 minutes later.

He presented as a full activation to the trauma center. On his primary survey, he was noted to have a hoarse voice and stridor. Breath sounds were diminished on the left. He would not tolerate lying flat. Pulses were strong. His initial vital signs were: P 130, BP 159/114, pox 83% on a non-rebreather, GCS 15. When fully exposed, he was noted to have a GSW to his right cheek. He had significant soft tissue swelling and crepitus along the left shoulder and both sides of his neck. He had a GSW to his left anterior chest wall.

The massive transfusion protocol was initiated. He had additional IVs placed and received both blood and saline. A left chest tube was placed. He was intubated by anesthesia. CT chest/abdomen/pelvis were obtained as well as a CT angiogram of the neck. Imaging of his neck revealed a laceration of the thyroid isthmus and right lobe with a mild amount of active hemorrhage, extensive emphysema throughout the neck concerning for injury to the tracheobronchial tree, comminuted fracture of the right angle of the mandible and left medial clavicle fracture. He was taken directly to the OR.

In the OR, an esophagogastroduodenoscopy showed no esophageal injury. Video-assisted thoracoscopy revealed no intrathoracic injury. He underwent neck exploration, tracheal repair, rotational muscle flap and complex wound closure of the neck. He remained mechanically ventilated for several days and returned the OR for debridement of his right facial wound. His chest tube was removed and he was ultimately extubated. He initially had difficulty swallowing and required thickened feeds. He ultimately passed his swallow study, had normal vocal cord function, was advanced to a regular diet and was discharged home 20 days after admission.

At follow up, his thyroid levels were normal and all wounds were healing appropriately.

Thyroid Trauma-A National Analysis of Incidence, Mortality, and Concomitant Injury.

Spencer D, **Grigorian** A, Schubl S, Awad K, Elfenbein D, Dogar T, Nahmias J.J

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This review of the National Trauma Data Bank from 2007-2015 revealed the incidence of thyroid injury was 0.02%. 40.3% of patients had a concomitant neck injury. Most patients had a penetrating mechanism. The most frequent concomitant injury was to the trachea (64.2% of patients). Only about 20% of patients underwent operative intervention of the thyroid with direct thyroid repair being four times more common than thyroidectomy.