

Tiger Trauma

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INTRODUCTION

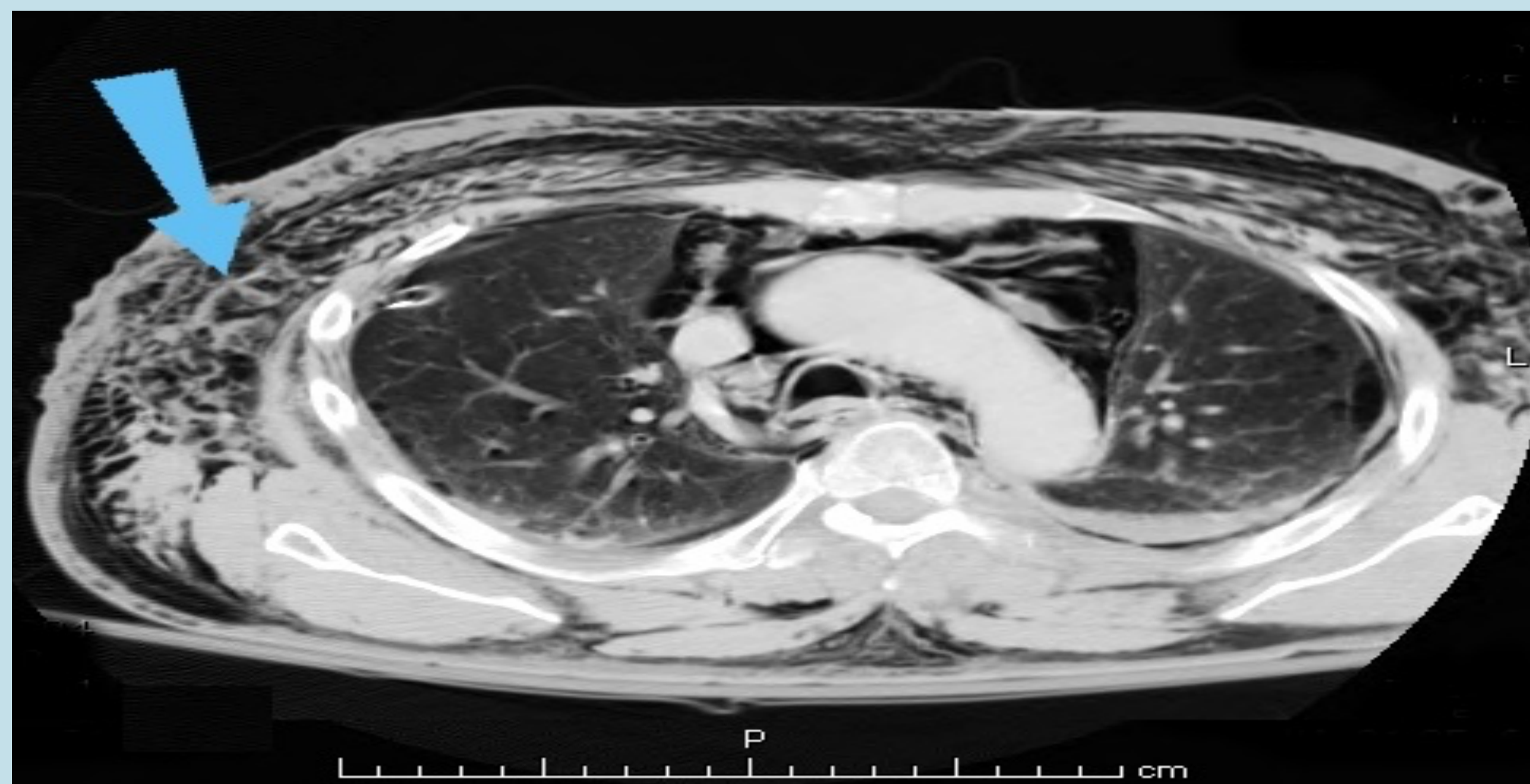
Patient: 40 y/o female presented for a large cat mauling with PMH of season allergies

Case Description: Patient's trauma was from a tiger mauling at the local zoo. She was emergently transported to the local tertiary community hospital for stabilization and treatment. She suffered from 33 different lacerations of multiple puncture wounds across her chest, full thickness lacerations to her left and posterior neck, left posterior scalp, and left arm. Vitals were stable and GCS 15. She was able to move all extremities with some weakness to her LUE and right sided facial droop with ptosis. She denied drug, alcohol use, or blood thinners.

Initial labs: WBC 5, Hbg 4.1 (L), Hct 13.8 (L), Plt 120 (L), INR 2.51 (H), and ABG pH 7.37 pO2 175 pCO23 BE -5. POCT labs did not match clinical picture and were redrawn.

Repeat labs: WBC 12.8 (H), Hbg 11.8 (L), Hct 35.4 (L), Plt 245, Na 137, K 4.3, Cl 106, CO2 18 (L), BUN 15, SCr 0.76, BS 165 (H), INR 1.25, APTT 23.8 (L)

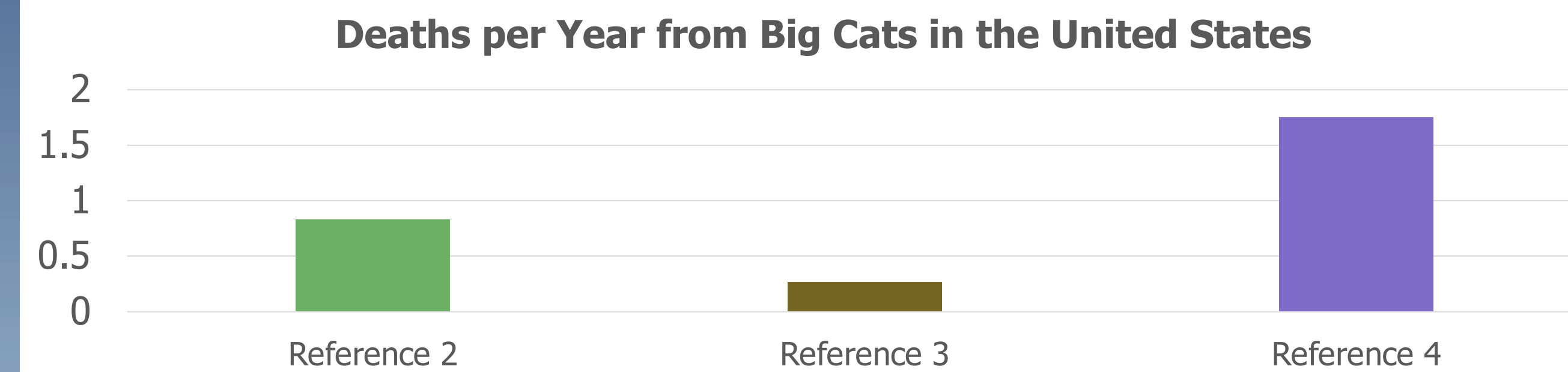
Imaging: CT imaging illustrated a stable spinous process fractures at C5 and C6, non-displaced fractures of the left transverse process at C7 and T1, extensive subcutaneous emphysema within the inferior neck, superior right chest, and left clavicle region, as well as, air within the cervical canal and extrinsic to the thecal sac. MRI suggested ligamentous strain in the posterior longitudinal ligament at the C2-3 level, small amount of paraspinal hemorrhage on the left C2-3, within the interspinous ligaments C3-7 and marked edema/hemorrhage within the trunks and divisions of the left brachial plexus highly suspicious for brachial plexus injury.



Subcutaneous Emphysema of the Superior Chest¹

DISCUSSION

Epidemiology:



For every 12 mauling's, a person dies from a big cat.² In comparison, lightning kills 49 and brain eating amoeba kill 2.5 people per year in the United States.^{5,6}

Risk factors: Tigers are predatory, non-domesticated animals that can cause severe soft tissue damage and bone fractures.⁷ The greatest risk factor is exposure to tigers and in US, this is from captivity in zoos or private ownership.

Pathology: Tigers most commonly known attack prey from behind and compress the neck to cause asphyxiation.

PRESENTATION

Primary survey: Airway patient, Breathing normal, Circulation SBP>90, External bleeding yes, Disability alert and oriented x 4, Moves extremities yes

Secondary survey: General alert, cooperative, and distressed; Head large laceration/avulsion to left posterior scalp, Face/maxilla: atraumatic, right sided facial droop with right eye ptosis, Ears right canal obstructed by cerumen and left canal obstructed by blood, Mandible no malocclusion, Teeth normal dentition

She was subsequently intubated for distress, potential airway decompensation, and possible carotid artery injury. Vancomycin, azithromycin, and ampicillin-sulbactam were administered as she was taken to CT for imaging with Aspen Collar. Then she was taken to the operating room for washout and closure of 33 lacerations with 2 drains placed in the deeper wounds.

After extubating, patient was found to have numbness in the left arm predominance in the first and second digits. She had a 0/5 strength in the left deltoid and bicep, 3/5 in the triceps, and full wrist extension, flexion, and handgrip.

Treatment: ENT and neurosurgeon ordered MRI and diagnosed right facial palsy, left brachial plexus injury at C5-C6 roots, and began dexamethasone treatment.



Opus sectile panel: tiger attacking a calf. Coloured marbles, Roman artwork from the second quarter of the 4th century CE.⁹

PRESENTATION CONT.

ID physician tailored antibiotics to vancomycin for human skin flora and ampicillin/sulbactam for *Pasteurella multocida* from the tiger.⁸ She had received a tetanus booster the prior month and the tiger was vaccinated from rabies.

CASE RESOLUTION

She was to switch to doxycycline, amoxicillin/clavulanate, and wound care after discharge. She was transferred for reconstructive surgery for the brachial plexus injury, electromyography, and electroneuronography testing.

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