PTS Case Presentation

Shark Bite
14: FROM: Web_User
Trauma alpha, 13y
old M. shark bite to ear and shoulder.
Patient Presentation

• 13 year-old left-handed boy
  • Lobster hunting around 0700 when he was attacked by a shark
  • Injuries to the left face/torso/arm

• Prior to arrival:
  • Immobilization, 700mL NS, Fentanyl 25mcg

• Presented to RCHSD trauma bay around 0750

• Awake, alert, appropriate, pale appearing

• Initial vitals: Temp 36.1C, HR 74, BP 102/67, SpO2 95%
ATLS Primary Survey

• Airway – Intact

• Breathing – Bilateral symmetric breath sounds

• Circulation – Symmetric radial, femoral, pedal pulses

• Disability – GCS 15

• Exposure – Wet suit removed, warm blankets applied
ATLS Secondary Survey
Initial Workup

• Labs
  • Hgb/Hct: 10.9/32.8
  • INR: 1.2, PTT: 27, Fibrinogen: 207
  • VBG: 7.24/46.9/25.0/46.9/-5

• Imaging
  • CXR, XR C spine, XR Left Shoulder
Initial ED Management

- Resuscitation (500mL Crystalloid, 1U PRBC)
- IV ABX (unasyn)
- Pain control
- Packing of wound
- Ortho & plastic surgery consulted
Operative Management

• Pediatric General Surgery
  • Wound exploration
  • Evaluation of axillary vessels/brachial plexus
Operative Management

• Plastic Surgery
  • Repair of complex conchal, earlobe lower one-third ear/laceration 4.0 cm.
  • Repair of V-flap laceration, left cheek, 5 x 2.7 cm.
  • Repair of laceration of left anterior shoulder, 3.4 cm.
  • Repair of laceration of left anterior shoulder, 4.5 cm.
  • Repair of large flap laceration of the left posterior scapular thoracic wall area, 20 x 6 cm after the orthopedists had repaired the joint and bone and muscular structures in the subcutaneous area.
Post-Operative Course

• Uneventful post-operative ICU course

• Infectious Disease, Pain Team, Orthopedics, Plastics, ENT, Rehab, and PT/OT
  • ID consult - Cefepime and doxycycline in hospital, PO ciprofloxacin and doxycycline PO for a 3 week course of antibiotics

• Transferred out of the ICU 10/2/18 (POD#3)
Post-Operative Course

• Concern for left arm swelling (POD#4)
  • US negative for DVT
  • Started on Lovenox

• Discharged home on 10/4/18 (POD#5)
Ongoing Recovery Issues

• Left shoulder girdle strength – working with PT
  • Has begun pitching again, ongoing issues
Ongoing Recovery Issues

• Left shoulder girdle strength – working with PT
  • Has begun pitching again, ongoing issues

• Left facial nerve palsy – Plastic Surgery unlikely to intervene

• Hypertrophic scars - pulsed dye laser (PDL), fractional CO2
  laser, kenalog
Ongoing Recovery Issues

• Left shoulder girdle strength – working with PT
  • Has begun pitching again, ongoing issues

• Left facial nerve palsy – Plastic Surgery unlikely to intervene

• Hypertrophic scars – Dermatology treating with pulsed dye laser (PDL), fractional CO2 laser, kenalog

• Psychologic recovery and impact on family
Antibiotic Management

Review of Literature for Antibiotic Management of Salt Water Shark Bites
Our Antibiotic Management

- Received Unasyn in the trauma bay
- Intraoperatively received Unasyn and Ancef
- Discussed with ID and post op was treated with cefepime and doxycycline
- Ultimately transitioned to ciprofloxacin and doxycycline PO for a 3 week course
- Also on ciprofloxacin drops for left ear
- DNA swab from wet suit confirmed shark was a Great White
Conclusions

• Empiric coverage of common oral flora found in sharks is important in the treatment of shark bites

• *Vibrio, Staphylococcus, Streptococcus, Pseudomonal,* and *Enterococcus* species are the most likely to be isolated

• Treatment with a single fluoroquinolone or with a 3rd generation cephalosporin plus doxycycline is recommended
Questions?
References


