Airway Compromise

Dr. Noah Forman
AOSSM
August 2015
Disclosure

- I do not have any financial or any other conflicts or relationships that would influence this presentation.

- I have signed a complete AOSSM disclosure statement confirming no conflicts.
Team Approach

• Initial assessment Trainer/MD

• Secondary assessment and treatment by individual with highest skill level

• Emergency extrication plan to tertiary care center
Mock Emergency Airway Management Drill

Emergency situation is not the time to practice your skills
Emergency Management

A  Airway
- RR
- O₂ Sats
- Give O₂

B  Breathing
- Patent?
- Give airway support if necessary

C  Circulation
- HR
- BP
- Cap refill
- IV access and bleed

D  Disability
- Head injury?
- Infection?
- Bleeding?
- Temperature?
- BM?
Airway Compromise

- Life threatening Emergency Situation

- Be prepared
Causes of Airway Compromise

Trauma to Head, Neck or Face
- Puck or stick to mouth or throat
- Blunt trauma leading to respiratory compromise (pneumothroax)

Obstruction – Foreign Body
- Aspiration of mouth guard or teeth

Acute Respiratory Failure
- Asthma – know your player history
Evaluation of the Airway

Player Assessment:
• Colour – Check for cyanosis

• Clutching throat

• Able to talk

• Quick pulse and respiratory rate (pulse oxyimeter)
Managing the Airway

Assess for Foreign Body – Magill Forceps

Jaw thrust or chin lift maneuver

Nasal or oral airway
Managing the Airway (Continued)

Bag valve mask

Portable suction
Emergency Endotracheal Intubation

• Be prepared

• Intubation kit checked and ready

• Drugs (check expiration date regularly)

• Portable oxygen

• Portable monitor
Rapid Sequence Intubation (RSI)

- Etomidate 0.3mg/kg

- Succinylcholine 1.5mg/kg
  - Can cause bradycardia - atropine on hand

- **Do not administer meds if you are unable to protect airway**

- MD to accompany to hospital if transport required
Surgical Airway

**Cricothyrotomy:**
- Unsuccessful endotracheal intubation
- Mandibular fracture
- Major facial trauma
- Foreign body/blood in upper airway

**Tracheostomy:**
- Anterior neck trauma
- Laryngeal fracture
Surgical Airway Anatomy
Surgical Airway Kit
Emergency Surgical Cricothryotomy

1. Position the patient, apply lidocaine (if needed) and sterilize field with antiseptic solution
2. Palpate thyroid and cricoid cartilage with the space between them containing the membrane
3. Make a midline vertical incision 3 cm long
4. Palpate the membrane with index finger
5. Insert tracheal hook
6. Dilate the incision vertically with a Trousseau Dilator
7. Insert tracheal tube, inflate balloon, and attach to BBM and ventilate
Critical Practice Points

• Be prepared
• Team approach
• Up to date equipment and drugs
• Highly skilled personnel
• Extrication plan
Thank You