• Thursday morning

• Paediatric ENT list

• 2 out of 5 Patients already cancelled (unfit)
  • 2y old chronic wheezer with current LRTI
  • 8y old awaiting Ix due to recent FHx of sudden cardiac death

• Informed duty consultant of cases
Pre-op Visit

- AD, 7y 4m, 21kg
- Elective grommets
- Reviewed pre-op ‘clerking’ paperwork (not clear who documents this assessment)
- Asthma
  - “…a little worse recently with hay fever”
  - No admissions / oral steroids / URTI / LRTI
- Chronic cough, > 1 year, no recent changes
- SCBU admission after birth for ‘milk aspiration’
- No other significant PMH
Induction

• Salbutamol pre-med given on ward
• “Number 1” anaesthetic
  • Fentanyl, propofol, LMA
• Uneventful
• Slight audible airway noise noticed when pt. was transferred to table
  • O/E few right sided crackles
  • RR 16/min, good $V_T$, $SpO_2$ 95 - 96% with $FiO_2$ 0.4
  • No immediate major concerns, decided to proceed
The Procedure

- EUA and bilateral grommets
- Continued adequate spontaneous ventilation
- Grommets completed
The Procedure

- EUA for ? proceed to adenoid surgery
- Surgical occlusion of LMA ➔ ‘seesaw’ respiratory movements and coughing
- Suggested removal of surgical instrument
- Airway now patent, but
  - $\text{SpO}_2$ falling slightly (93%)
  - Increased RR
  - Breathing sounds ‘fruity’
Intervention

- $\text{SpO}_2$ now 90%
- Assisted ventilation with bag and PEEP, FiO$_2$ 1.0
- Called for ODP (currently absent)
- No significant improvement
  - $\text{SpO}_2$ now 92% despite 100% $\text{O}_2$
- Decided to intubate (abandon further surgery)
- Salbutamol via LMA
- Called for consultant backup
Intubation

- Propofol bolus + Sux
- Lots of sputum noted in pharynx on removal of LMA (suctioned)
- Grade 1 larynx
- Tube position checked
  - Bilat. breath sounds (but crackles+++ on right)
  - CO$_2$
- Continued bag ventilation with PEEP but little change in SpO$_2$ initially
- Consultant arrives
Continued Management

• Gradual improvement in SpO₂ to 95%
• Weaned FiO₂ and maintained SpO₂
• Trial of extubation
• Falling SpO₂ again
• Re-intubated with high FiO₂
• Requested CXR
Diagnosis

- Mucus plug of RMB with absorption atelectasis of right lung
- Plan
  - Bronchoscopy and attempt to re-inflate right lung?
  - Try to extubate again?
  - Keep intubated and transfer to BCH?
- Asymmetrical chest wall now
- Also now noted clubbing of finger nails
- All because of asthma??
- Contacted consultant paediatrician
- ITU consultant also arrives
Bronchoscopy

• (Not actual Image)
Progress

- Suctioned ‘plenty’ of sputum from large airways
- Saline washes
- IPPV with PEEP
- Gradually weaned FiO$_2$
- SpO$_2$ 99%
- Repeat CXR
  - Fully expanded right lung
- Extubate?
Extubation

- Extubated without incident
- Transferred to recovery
- Back to ward
- Playing normally and demanding chips
Afterwards

• Bronchiectasis more likely than asthma

• Outpatient follow up under paediatricians

• ??CF
Discussion

- Any comments / thoughts?