

Treatment-refractory asthma in the child

Nothing is working?

- Continuous neb, ...or
- **Salbutamol infusion**
 - Proven to offer an advantage over nebulizer
- “Summon experienced help” is the key phrase
- **IV aminophylline 5mg/kg over 20 min**
- **..then infuse it at 1mg/kg/hr, while monitoring the ECG**
 - Seizures, vomiting or fatal arrhythmia follow rapid infusion
- magnesium sulphate, 25-40 mg/kg over 20 minutes
- **intubate with ketamine IF:**
 - progressive exhaustion
 - progressive deterioration in clinical condition
 - SaO₂ dropping
 - PCO₂ rising
- **There is no evidence to support the use of Heliox or leukotriene antagonists**

Asthma in the child who is beginning to improve: post crisis care

- Reassurance
- Stop IV salbutamol if sats are rising or recession is minimal / PEFr goes over 50% of predicted
- Change from continuous nebs to spacer MDI
- Reduce frequency of nebs

A little more on asthma

- URTIS are the most common precipitant
- Virus cause 90% of these
- Exercise induced symptoms: heat and water loss from the mucosa causes irritation and thus bronchoconstriction