Management of Acute Exacerbation of Asthma / Wheeze

Secondary Care Clinical Assessment Tool for Children Under 2 Years



Assessment

History

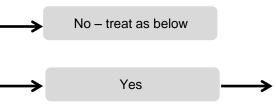
- · Breathless/wheeze/cough
- · Viral or allergic trigger
- · Previous episodes or interval symptoms
- · FH or personal history asthma, eczema or atopy
- · Current/Previous treatment and response

Examination

- · Feeding and speech
- Respiratory rate
- · Chest wall expansion and movement
- · Use of accessory muscles
- · Auscultation of chest reduced air entry, wheeze, prolonged expiration
- Oxygen Saturation (Sats)

Consider other diagnosis

- Pneumonia
- · Bronchiolitis in under 1yr old
- Croup
- Foreign body



Moderate Exacerbation

- · Able to feed or talk
- Moderate use of accessory muscles
- · Audible wheeze
- Sats >92% in air

< 1 yr:

- RR ≤40/min HR 120-170/min
- 1-2yrs:
- RR ≤35/min HR 80-110/min

Severe

· Previous attack within last 2 weeks

Treat according to most severe feature

- Too breathless to feed or talk
- Marked use of accessory muscles and wheeze
- Sats< 92 % in air
- <1 yr:</p>
- RR >40/min HR>170/min
- 1- 2yrs:
- RR >35/min HR >110/min

Life Threatening

· Sats <92% in air plus any of the following:

It may not be asthma.

Seek expert help

- Silent chest
- Poor respiratory effort
- · Exhausted and unresponsive
- Coma/agitation
- Cyanosis
- Bradycardia
- Apnoea
- Respiratory arrest

- Give Salbutamol 2-10 puffs via spacer+facemask (one puff at a time.
- Increase by 2 puffs every 2 minutes up to 10 puffs according to response
- Assess response and repeat if necessary
- · Give stat dose soluble Prednisolone 10mg

- Give high flow Oxygen via fitted mask aim for sats 94-98% Give nebulised Salbutamol 2.5mg
- (using 6L-8L oxygen)
- Reassess and Repeat at 20-30 minute intervals or as necessary
- · Give stat dose soluble Prednisolone
- Repeat dose if patient vomits, or consider IV Hydrocortisone 4mg/Kg
- If Poor response Ipatropium Bromide 250 micrograms via oxygen driven nebuliser repeated every 20-30minutes
- Poor response see life-threatening
- Discuss with senior clinician or Paediatrician or PICU team

Good response

Reassess within 1 hour

- Subtle or no use of accessory muscles
- Minimum wheeze
- Sats >92% in air

Poor Response

Reconsider diagnosis: Severe or Life Threatening episode

Good response Continue

salbutamol 1-4 hourly Re-Assess regularly

Admit/further observation on Children's Assessment unit for all cases if severe symptoms after initial treatment

- · Commence resuscitation -ABC
- · Give high flow Oxygen via mask

PAEDIATRIC CARDIAC ARREST CALL

- · Give back to back nebulised Salbutamol 2.5mg (using 6L-8L oxygen)
- · Give stat dose soluble Prednisolone 10mg
- · Repeat dose if patient vomits, or consider IV Hydrocortisone 4ma/Ka
- Give nebulised Ipratropium Bromide 250mcg (using 6L-8L oxygen). Repeat every 20-30 minutes

POOR RESPONSE

- Consider IV Salbutamol and Magnesium
- Consider Chest X-Ray
- Arrange PICU/ITU admission

Discharge from hospital and GP

Patient must be stable have minimal recession with Sats >92% and manage 3-4 hourly between doses of inhaler

- Discharge on salbutamol 2-10 puffs up to 4 hourly via spacer + facemask
- Complete a 3 day course of Prednisolone10 mg or 2mg/kg/dose
- · Give Acute Asthma Management Plan
- · Check inhaler technique and regular medication
- Review overall asthma control and consider need to step up medication
- · Arrange review at GP practise 48hrs
- Open access to Children's Assessment Unit for 48hours
- Full respiratory review at GP practise in 7-14 days
- Arrange FU in clinic with Asthma Consultant/nurse

THINK TTT-

consider compliance with existing Therapy, Inhaler Technique and Triggers before stepping up treatment