

# Childhood asthma

## Epidemiology

Affects 15% of children

'hygiene hypothesis'

Atopy rising

Clinical diagnosis if under 6

## History

- duration/frequency of coughing +/- wheeze
- treatments tried
- Trigger factors
- family history of atopy
- parental understanding

## Allergen reduction

- Avoid smoking
- HDM reduction (carpet removal, high temp wash of bed linen, good ventilation, remove soft toys, cover mattress, avoid duvets)

## Examination

- ability to talk
- assess mental status
- Respiratory rate
- use of accessory muscles of respiration
- pulse rate BP
- Chest hyperinflation

## Red Flags

SaO<sub>2</sub> < 90%  
Inability to talk or count to 5  
Altered consciousness  
Agitation  
Bradycardia  
Poor respiratory effort  
Silent chest  
Cyanosis

## Investigations

- CXR only if severe
- pulse oximetry
- blood gases if life-threatening
- PEFR unhelpful in acute asthma

## Specialist referral if:

Symptoms from birth  
FTT  
Nasal polyps  
ICS > 400ug/day  
If diagnosis in doubt

## Treatment

- Oxygen if sats < 90%
- prednisolone 1mg/kg/d for 3 – 5 days
- spacer preferable to nebulizer (salbutamol 6 puffs if under 6 years. -10 – 12 puffs if over 6 years, every 15 mins)
- If poor response refer to hospital

## Background control

- number of steroid courses / ER / GP visits
- Nocturnal and exercise-induced symptoms
- Daily symptoms
- School days missed
- Frequent beta 2 agonist use

## References

- National asthma programme guideline 2012
- BTS /SIGN CG 101 2011
- GINA guidelines 2010
- Irish Asthma Society website

## TAKE HOME MESSAGES

Prevalence of asthma is increasing  
Education/empowerment re background control is vital  
Age-appropriate inhaler devices  
Allergen avoidance disappointing

**This algorithm has been produced by the National Paediatric and Neonatology Clinical Programmes. It is aimed at medical, nursing and allied health professionals working in both primary and emergency care settings.**

**Amendments following suggestions by QIP committee of ICGP . Secondary care denoted in pink**

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