

BEST Education Sessions, Spring 2016

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Paediatric Asthma

with

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Respiratory CCN

Definition

- 'Asthmas'
- BTS / SIGN (and worldwide)
 - Definition
 - Stepwise approach
 - Indications for referral to secondary care

'Asthma responds to asthma treatment'

What else could it be?

- PBB (Persistent bacterial bronchitis)
- Reflux
- Post-viral cough
- Congenital malformation
- Vocal cord dysfunction
- Dysfunctional breathing

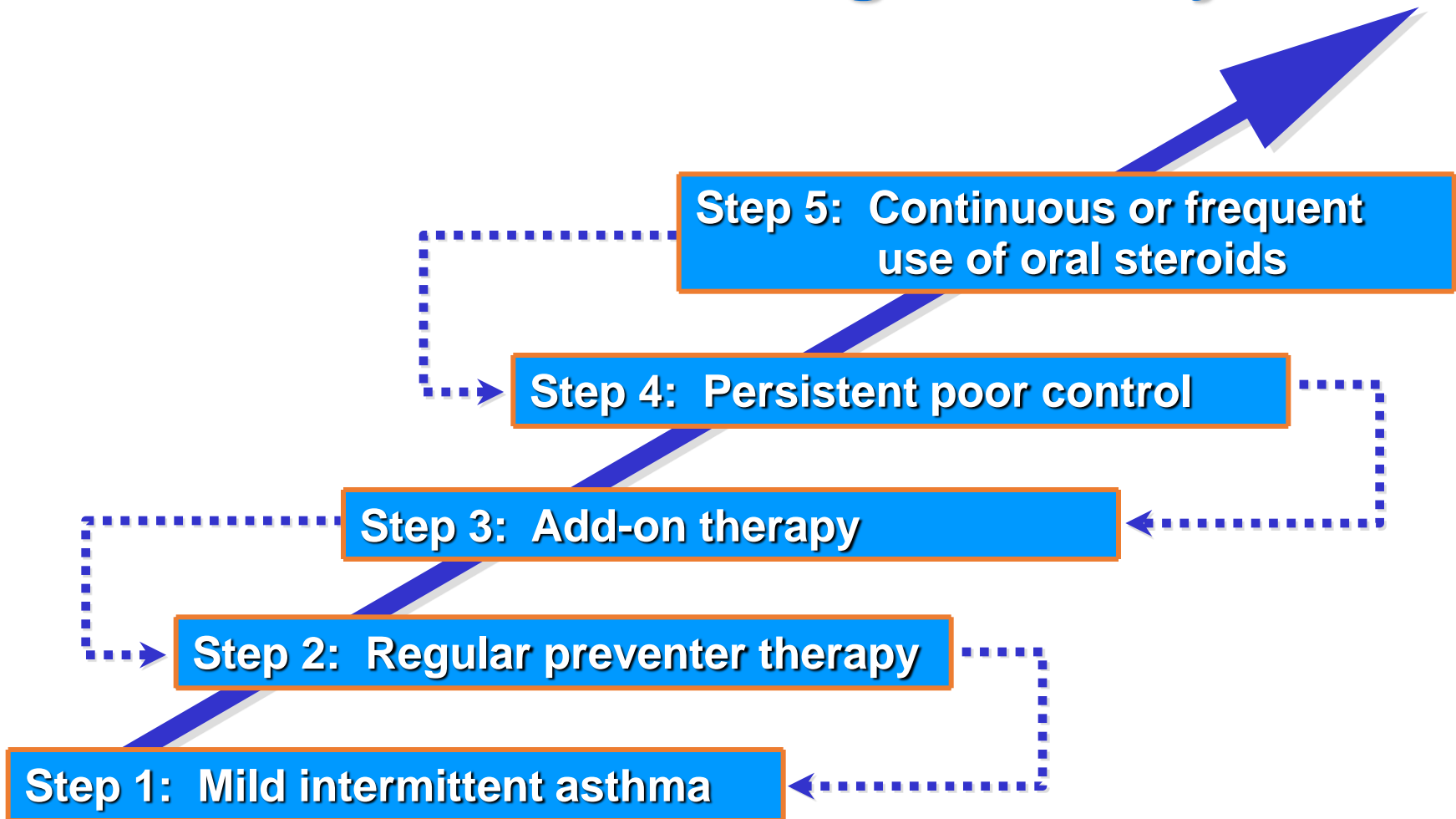
Treatment

- Not always easy for practical reasons
- Important to use appropriate drug in appropriate patients
- Guidelines exist
- Delivery device is probably the single most important issue

Asthma basics

- Stepwise approach – handout
- Inhaler technique – Zena
- Inhaler effectiveness – Zena
- Inhaler appropriateness – Zena

Stepwise management of asthma in children aged 5-12 years



'Certainties'

- No oral bronchodilators
 - Ibuprofen OK
 - Asthma management plan
 - Combination inhalers vs separate
 - No doubling ICS
 - No home nebulisers
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- No ICS in viral induced wheeze
 - 'No' antibiotics

'Uncertainties'

- When to start prednisolone
- Prednisolone in younger children
- Which patients may benefit from montelukast
- Montelukast in viral induced wheeze
- LABAs in under 5s

Disordered perception of dyspnoea

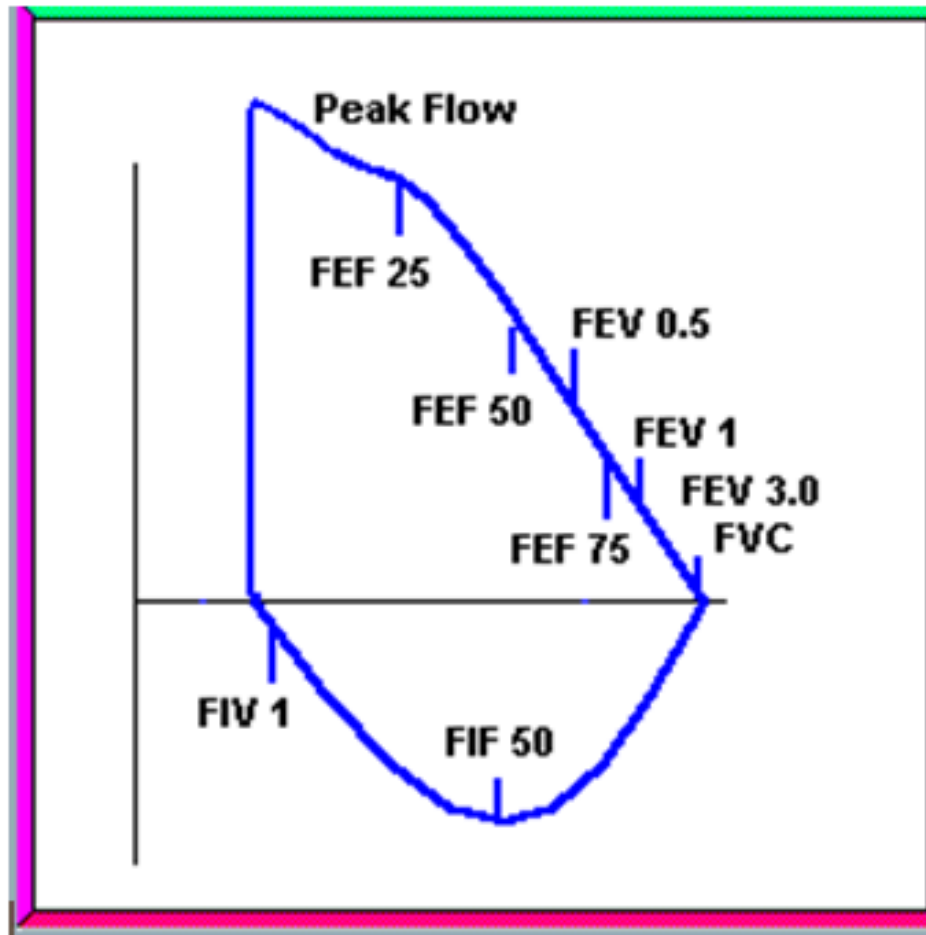
- Recognised phenomenon, not just in asthma
- ?Genetic variation in autonomic nervous system function
- Risk of self or others underestimating degree of respiratory obstruction
- Benefit for specific patients of objective measures such as peak flow meters

Peak Flow / Spirometry

- Objective measures to assist in diagnosis and monitoring
- Requires cooperation so not always easy in children
- Incentive spirometers and practice can obtain results in under 5s
- Peak flow (and FEV1) effort dependent; FEF 25-75 not effort dependent but more intra-individual variation

Forced Vital Capacity Maneuver

**Airflow,
L/sec**



Lung volume

Interpretation of spirometry

- FEV1 (NB normal range 80-120% so trend for individual may be more important than absolute number)
- Reversibility of FEV1 (12%)
- Scalloping of the curve
- Reversibility of FEF25-75 (50%)
- FEV / FVC <80%

Miscellaneous

- Natural history
- HDM (BTS)
- Flying with asthma
- Asthma UK

Miscellaneous

- Seretide dose / inhaler issue
- % response to MLK
- 'SMART'
- Salbutamol in school