Asthma in CYP

Types of Asthma presentation

- EVW – usually <2 years with recurrent Rhinovirus and RSV – present with acute severe wheeze necessitating admission. The symptoms are usually dramatic and driven by mucous, and have minimal interval symptoms. No treatment shown to be beneficial but still use intermittent ICS +/- Montelukast +/- Macrolide if having many admissions or PICU visits. Good prognosis.
- MTW – atopic children can be younger but usually have wheeze after 3-4 years of age but may have viral-induced exacerbations with some interval symptoms. This group usually have raised eosin and IgE inc specific food and/or aeroallergies, and respond well to ICS+LABA +/- Montelukast (esp if sensitized to HDM and other aeroallergens).

Types of Asthma presentation - cont

- Older (>5 years) who may or may not be atopic, have interval symptoms but very little/few exacerbations, and hence don't often present to hospital. This group, once diagnosed, respond well to ICS+LABA, sometimes at high doses.
- Teenagers with well established asthma, especially those MTW graduates (often with early multiple food allergies and eczema) – most challenging group with compliance and need for regular monitoring
- Late onset especially with exertional asthma, obesity and females – also very challenging in terms of treatment as usually neutrophilic

When and who to refer to secondary care

- > 3 OCS in a year or more than 2 admissions needing “burst” therapy
- > 3-4 SABA MDIs/ year
- Any child needing PICU care
- Those under tertiary care must also have local secondary care follow up
- On-going interval symptoms despite initial treatment with ICS, and hence needing to consider adding LABA, or already on mod-high ICS+LABA
- Uncertain diagnosis eg persistent wet cough or habit/neurogenic cough, any associated finger clubbing (non-familial) and EILO
- Severe atopy with allergies especially food +/- anaphylaxis
- Children having significant school absence due to asthma or home schooled

Secondary care

- Review of asthma including history, smoke exposure (and vape), social background including school issues (and input) etc.
- Spirometry with BDR +/- PEF and FeNO
- Management plan inc proper use of MDI with appropriate VHC/spacer and documented, with PAAP and copy in notes and school and ideally to Primary care.
- Home visit usually planned after 2nd appt or if admitted with asthma exacerbation (phone triage initially)
- Other tests – mainly in atypical or poor responders inc IgE, Sp IgE,SPT, eosin, CXR, nNO, FeNO suppression, sweat test, CFTR genetics

Secondary to Tertiary

- PICU stay
- Recurrent (>2) severe (IV treatment) or life-threatening events associated with anaphylaxis
- Continued symptoms despite high dose ICS+LABA +/- Theophylline
- Early access to Biologics
- Suppurative lung disease eg atypical CF and PCD
- Failure to de-escalate treatment in those without definite asthma eg neurogenic cough

Questions?

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