Clearing clouds of understanding of asthma

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objectives

- Asthma what we all know
- Asthma what we need to know
- need for changing the name
- When is it underdiagnosed
- When is asthma overdiagnosed
- Reasons for treatment / compliance failure
- Modifications in therapy for indian settings

What we all know

- It’s a chronic disease of coughing and or wheezing with or without allergy atopy
- Cough followed by vomiting is like asthmatic, while vomiting followed by cough is like TA infection
- Long term therapy for months to years
- 3 episodes of afebrile symptoms in a school going child **is** asthma, in a preschool child **can be** asthma
- Inhalation therapy is in books but doesn’t go well with acceptance

What we all know

- **Acute treatment:**
- Salbutamol inhalations.. Repeat till response
- Add steroids if no response in 2 hour
- **Long term therapy:**
- Decide the grade or level
- Step up or step down
- More the night symptoms; longer or higher the steroids, longer and higher the bronchodilators

What we all know

- Investigations like chest xray, PEFR, Allergy test, IgE are useless in planning therapy
- Some patients improve, some do not improve, some get lost /serious
- Year long MDI difficult to sustain
- Diary not easy to chart or maintain
- Growth and quality of life has to suffer

Asthma what we need to know

- Asthma is not always damaa, and can be without wheezing or cough
- Asthma is not always allergy
- Asthma can only be episodic, cough variant, exercise induced and only nocturnal
- Its not a disease but a symptom complex associated with inflammation and does have exacerbating factors
- All that coughs after a cold or icecream isnt allergy or asthma
- Early morning exacerbations consistent with asthma, early night exacerbations consistent with infection, midnight exacerbations consistent with cardiac issues.

Asthma what we need to know

- Common causes of cough cold and even wheeze in kids are tonsilloadenoiditis or WALRI..
- Asthma is commonly coexistent with allergic rhinitis, reflux disease, eosinophilia and allergies
- Treatment of asthma cant be just bronchodilators/steroids but a collective management of all possibilities

What we all need to know

- Its not a lifetime disease all the time.. Asthma is known for natural remission with time.
- There is definite cure for asthma and that starts with doctor and patient education in understanding the treatment plan and its intricacies.
- Inhaler therapy can be tapered or stopped early if sufficient response documented.

Its good to not use the word..

- As the diagnosis of asthma is empirical and likely to pass on wrong message to different people; its always preferable to use the phrase
- “asthma like Illness” as the treatment in these situations is governed by symptom severity and frequency.
- It also helps in early switching over to other curable diagnoses if any.

What we need to know..

- Inhalation therapy isn't permanent for life
- Year long steroid therapy is not must
- Tapering should be prompt with 1 month symptom free phase. {3 months with GINA)
- Parent education, understanding, compliance, safety and superiority of inhalation therapy and making them understand importance of step up step down from breathing diary is key for successful cure.

MDI Need to know…

- Fails if poor education compliance and method
- Fails if spacer cleaning or damage issues
- Fails in severe attack
- Best for OPD, travel and portable use.
- Equivalent to nebulisation
- Exacerbation while on MDI means MDI likely to be empty or diagnosis is wrong.

MDI need to know..

- Rescue medicine is not only for severe symptoms but for any two episodes of cough too
- More the episodes of cough, more the frequency of rescue medicine
- Steroid inhalers come in picture if rescue medicine needed more than 6 times a day or night symptoms or persistent symptoms.
- Once started at- least 1-3 months therapy plan to be maintained for steroids.

MDI non asthma uses

- MDI can easily and effectively replace short term bronchodilator use
- Least side effects and smallest dose
- As and when therapy even in infective broncho constriction
- Reactive cough/wheeze, bronchiolitis
- Can replace syrups/nebulisations

Investigations need to know

- Important in ruling out other diagnoses
- Especially when early age of onset MAS, chest deformity Fibrosis, growth failure CF, reflux GER, chronic lung issues BO/COPD, TB Nodes/lung damage , persistent xray patch bronchiectasis, foreign body nuts,heart diseases PH/TR/ASD/VSD

Diary need to know

- New easy diary: breathingdiary.com
- Daily symptom recall diary
- Helps parents classify asthma severity to help in step up n down
- Helps us understand infections/exacerbations
- Helps us chart daily PEFR and Puff consumption
- One sheet goes for a month

Comprehensive management

- Looking for co morbidities and differentials is key in asthma diagnosis and therapy
- Patient education compliance diary and involvement in therapy is key for cure
- Allergen avoidance is not always possible but should be avoided as much.
- Reassurance, making aware of possible exacerbations-remission, early rescue MDI and screening of family members and allergens will help normalize quality of life of family.

When is it underdiagnosed..

- When it is attributed to season, infection, age
- When growth failure is neglected,
- In patients with cardiac issues
- In reflux disease
- When it is taken as virals without fever
- Mycoplasma infection, pertussis

when is it overdiagnosed..

- Tonsilloadenoiditis
- Sinusitis
- Viral fevers
- Flu
- TB, bronchiectasis, COPD, CLD

Its better to treat symptom complex

- Than start labelling

Definite asthma if

- School going
- Afebrile episodes
- Cough/wheeze repeated with exacerbating factors
- Has associated with itchy sneezy nose
- Has early morning and night symptom dominance
- Is reversible with bronchodilators with or without steroids

Definitely less likely to be just asthma if

- Chest deformity
- Age of onset less than 4 year age
- Neonatal insult/forceps/MAS/NICU stay
- First episode with pneumonia
- Non response to salbutamol and steroids over months
- History of foreign body inhalation
- Cardiac issues, syndromes, rickets, expiratory chest film

Reasons for treatment failure

- Missing GER, TA, sinusitis, lung issues, cardiac issues, growth failure, chest deformities
- Wrong dose/drug, wrong mdi, wrong space, wrong mask, wrong method, not explained maintenance and care of space mask mdi
- Mdi empty and not realised.
- Poor education about rescue medicine

Reasons for compliance failure

- Scare in the name
- Parents not explained the pathophysiology with breath tubes, technique of inhalation
- Parents not explained the course and plan of Mdi
- Parents not explained the rescue medicine
- Parents not explained when all meds will stop, or if it is addictive or habit forming
- Parents not explained about safety of MDI over any other oral medicines in long run

Gina modifications for indian settings

- Why?
- Allergens differ, infections differ
- Through out the year many seasons to cause exacerbation
- Year long therapy not practical; as next season starts and intra seasons frequent step up needed
- Cost, mentality of oral medicines

Major changes that may effect

- Short term symptoms= short term therapy
- Night symptoms = steroid therapy
- Steroids, once started at least for 1 month night symptom free period before tapering than standard 3 months
- Bronchodilator step up during seasons, with or without steroid stepups for 5 -7 days
- Oral montelukast may play a role for tablet minded people.
- Exacerbation prediction from PEFR and advance MDI dose
- Single combo inhaler for both rescue and maintenance
- Give treatment free phases and evaluate extensively for nonasthma conditions

questions