ASTHMA MANAGEMENT: 0–4 YEARS OF AGE (Part 1 of 2)

CLASSIFYING ASTHMA SEVERITY AND INITIATING TREATMENT

Assessing severity and initiating therapy in children who are not currently taking long-term control medication

Components of Severity		Classification of Asthma Severity			
		Intermittent	Persistent		
			Mild	Moderate	Severe
Impairment	Symptoms	≤2 days/week	>2 days/week but not daily	Daily	Throughout the day
	Nighttime awakenings	0	1–2×/month	3–4×/month	>1×/week
	Short-acting β_2-agonist use for symptom control (not prevention of EIB)	≤2 days/week	>2 days/week but not daily	Daily	Several times per day
	Interference with normal activity	None	Minor limitation	Some limitation	Extremely limited
Risk	**Exacerbations requiring oral systemic corticosteroids**	**0–1/year**	**≥2 exacerbations in 6 months requiring oral systemic corticosteroids, OR ≥4 wheezing episodes/1 year lasting >1 day AND risk factors for persistent asthma**		
		• **Consider severity and interval since last exacerbation** • **Frequency and severity may fluctuate over time** • **Exacerbations of any severity may occur in patients in any severity category**			
Recommended Step for Initiating Treatment		**Step 1**	**Step 2**	**Step 3 and consider short course of oral systemic corticosteroids**	
		In 2–6 weeks, depending on severity, evaluate level of asthma control that is achieved. If no clear benefit is observed in 4–6 weeks, consider adjusting therapy or alternative diagnoses.			

STEPWISE APPROACH FOR MANAGING ASTHMA

Intermittent Asthma

Persistent Asthma: Daily Medication
Consult with asthma specialist if Step 3 care or higher is required.
Consider consultation at Step 2.

Step 1
Preferred:
SABA PRN*

Step 2
Preferred:
Low-dose ICS
Alternative:
Cromolyn or Montelukast

Step 3
Preferred:
Medium-dose ICS

Step 4
Preferred:
Medium-dose ICS + either LABA or Montelukast

Step 5
Preferred:
High-dose ICS + either LABA or Montelukast

Step 6
Preferred:
High-dose ICS + either LABA or Montelukast
and
Oral systemic corticosteroids

Step up if needed
(first, check adherence, inhaler technique, and environmental control)

Assess control

Step down if possible
(and asthma is well controlled at least 3 months)

Patient Education and Environmental Control at Each Step

Quick-Relief Medication for All Patients

- SABA as needed for symptoms. Intensity of treatment depends on severity of symptoms
- With viral respiratory infection: SABA every 4–6hrs up to 24hrs (longer with physician consult). Consider short course of oral systemic corticosteroids if exacerbation is severe or patient has history of previous severe exacerbations
- Caution: Frequent use of SABA may indicate the need to step up treatment. See text for recommendations on initiating daily long-term-control therapy

(continued)

ASTHMA MANAGEMENT: 0–4 YEARS OF AGE (Part 2 of 2)

ASSESSING ASTHMA CONTROL AND ADJUSTING THERAPY

Components of Control		Classification of Asthma Control		
		Well Controlled	**Not Well Controlled**	**Very Poorly Controlled**
Impairment	Symptoms	≤2 days/week	>2 days/week	Throughout the day
	Nighttime awakenings	≤1×/month	>1×/month	>1×/week
	Interference with normal activity	None	Some limitation	Extremely limited
	Short-acting β_2-agonist use for symptom control (not prevention of EIB)	≤2 days/week	>2 days/week	Several times per day
Risk	**Exacerbations requiring oral systemic corticosteroids**	**0–1/year**	**2–3/year**	**>3/year**
	Treatment-related adverse effects	Medication side effects can vary in intensity from none to very troublesome and worrisome. The level of intensity does not correlate to specific levels of control but should be considered in the overall assessment of risk.		
Recommended Action for Treatment		• Maintain current step • Regular follow-up every 1–6 months • Consider step down if well controlled for at least 3 months	• Step up—1 step—and • Reevaluate in 2–6 weeks • If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy • For side effects, consider alternative treatment options	• Consider short course of oral systemic corticosteroids • Step up—1–2 steps—and • Reevaluate in 2 weeks • If no clear benefit in 4–6 weeks, consider alternative diagnoses or adjusting therapy • For side effects, consider alternative treatment options

NOTES

Key: EIB = exercise-induced bronchospasm; ICS = inhaled corticosteroid; LABA = inhaled long-acting β_2-agonist; SABA = inhaled short-acting β_2-agonist.
*Preferred therapy is based on *Expert Panel Report 2* from 1997.

REFERENCES

Adapted from National Asthma Education and Prevention Program. *Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma* 2007. U.S. Department of Health and Human Services. Available at: http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.pdf. Accessed on: November 26, 2012.

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