

Asthma Workshop

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Disclosures and Conflict of Interest

None

Objectives

- Review clinical pearls
- Discuss cases of patients with asthma

Wheezer

Wheezer is , a 2-year-old boy, with a 1 year history of recurrent episodes of wheezing.

Only wheezes when he gets a cold.

Does well in the summer but is sick almost all winter with episodes every month.

Wheezing responds to albuterol.

He needed 3 courses of prednisone this winter.

He has never been to the ED or admitted to the hospital.

Asthma vs viral wheezing

What additional information from his personal and family history could help you distinguish between asthma and virus induced wheezing?

Asthma Predictive Index

- ≥ 2 x wheezing in past 12 months at age 3 y visit and:
 - One of:
 - Parental asthma
 - Eczema
 - Aeroallergen sensation
 - Two of:
 - Wheezing without cold
 - Physician diagnosed allergic rhinitis
 - Allergic sensitization milk or egg

Pediatric Asthma Risk Score (PARS) Sheet

	Possible Scores		Child's Score
	No	Yes	
1. Parental Asthma	0	2	
2. Eczema before age 3 years	0	2	
3. Wheezing apart from colds	0	3	
4. Wheezing before age 3 years	0	3	
5. African-American Race	0	2	
6. SPT positive to ≥ 2 aero and/or food allergens	0	2	
Child's PARS (add lines 1-6 above):			

Patient Score Interpretation

Score	Risk of Asthma by age 7 years	Interpretation	
0	3%	LOW RISK	Children with these scores have a 1 in 33 [score of 0] to a 1 in 9 [score of 4] risk of developing asthma by age 7 years
2	6%		
3	8%		
4	11%		
5	15%	MODERATE RISK	Children with these scores have a 1 in 7 risk [Score of 5] to a 1 in 3 [Score of 8] risk of developing asthma by age 7 years
6	19%		
7	25%		
8	32%		
9	40%	HIGH RISK	Children with these scores have a 2 in 5 [Score of 9] to a 4 in 5 [Score of 14] risk of developing asthma by age 7 years
10	49%		
11	58%		
12	66%		
14	79%		

Asthma classification

You have diagnosed Jimmy with asthma based on additional information you have gathered by taking a thorough history. He needs albuterol 2 days per week but not daily

How would help you classify his asthma (impairment and risk)?

Treatment

How would you treat Wheezer and what is your follow up plan?

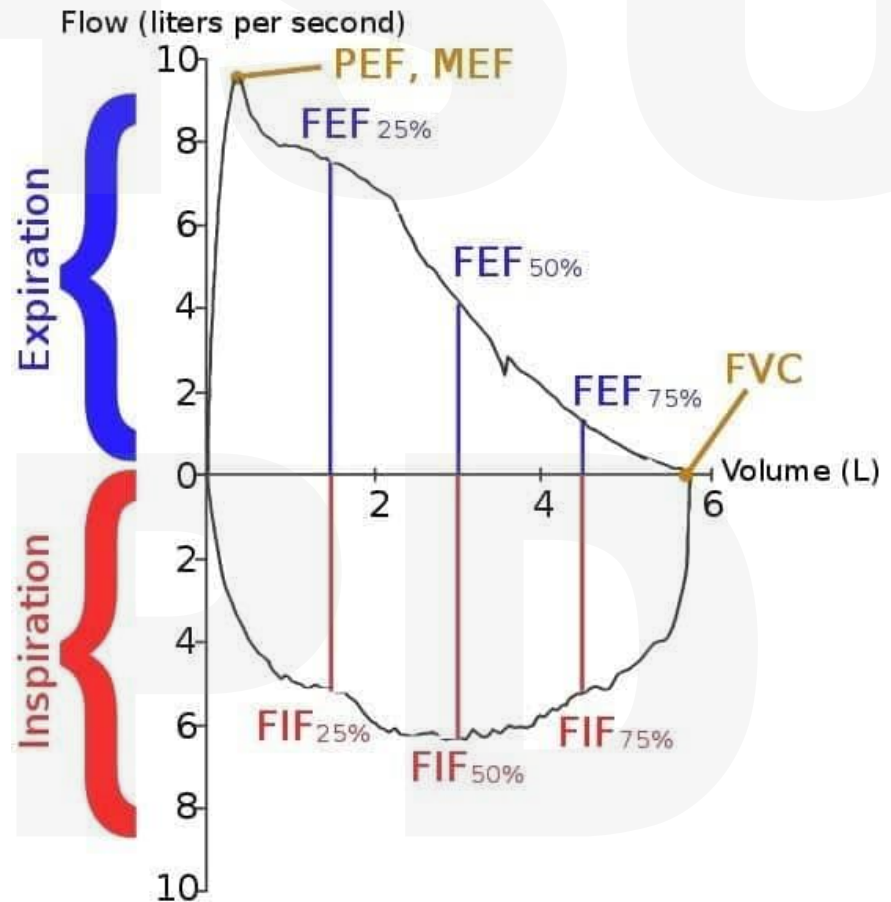
Monitoring Asthma

What criteria do you use to monitor his response to treatment?

Monitoring therapy response

- Albuterol use
- Frequency wheezing coughing
- Nighttime Sx
- Exercise Sx
- Frequency and severity of exacerbations

Monitoring therapy response

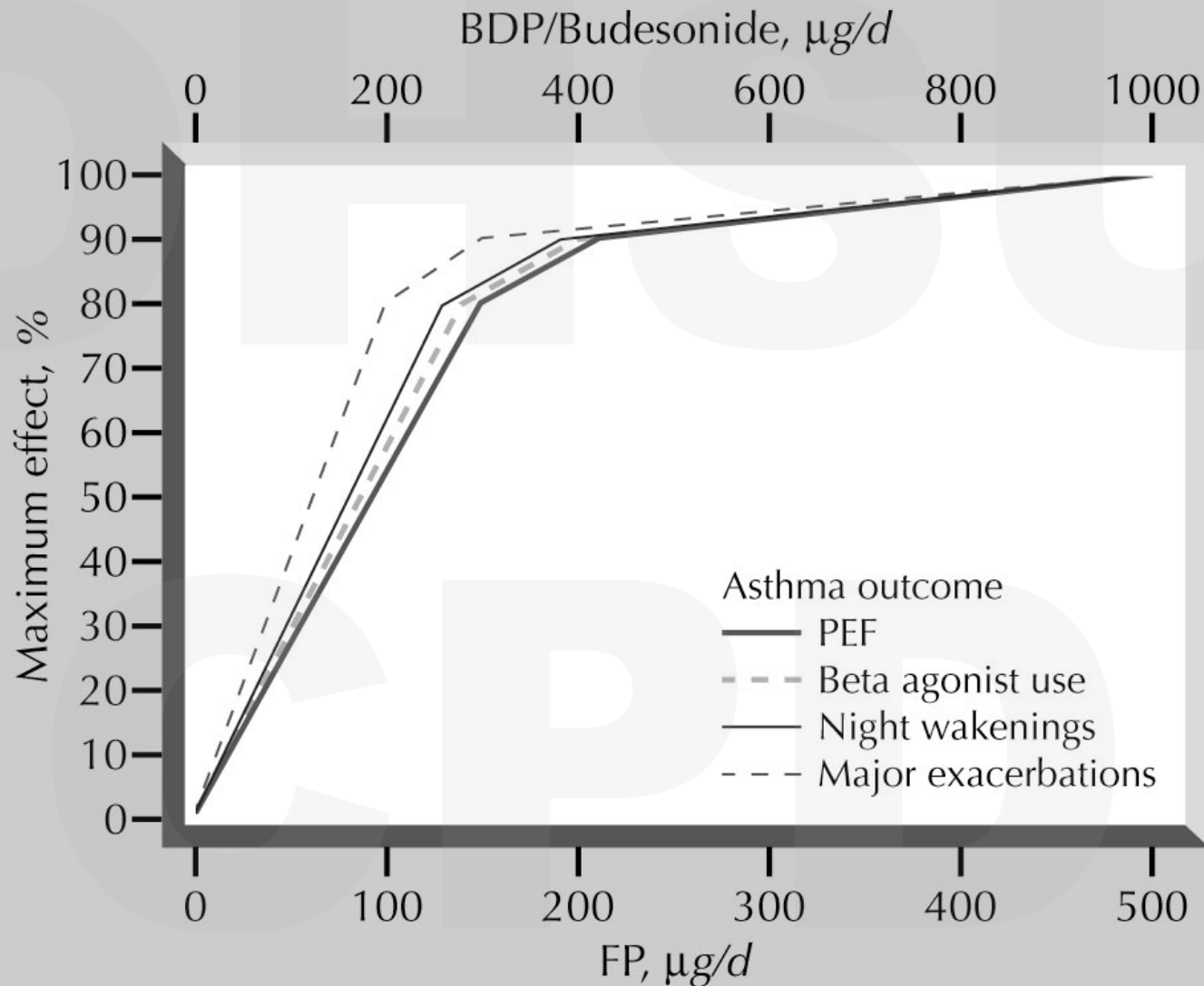


Side Effects

- His parents are concerned about side effects of his asthma medications, especially the inhaled steroid and Prelone.

How do you respond to their concerns?

Diminishing return with higher doses



What about the future?

His parents want to know if he will outgrow his asthma

What will you tell them?

Let's talk about tobacco smoke

After taking more of a history you learn that his grandma, who is a heavy smoker, takes care of him a couple of days during the week

How do you approach grandma about her smoking?

What if the treatment doesn't work

Jimmy has been on the recommended treatment regimen for a month. Unfortunately he is having persistent wheezing and required another course of Prelone

Why is he not responding to therapy?
What are your next steps?

Recommendations environment



Hypoallergenic Dogs?



What if patient doesn't respond to therapy?

1. Are they taking their medication?
2. How are they taking their medication?
3. Are environmental triggers identified and mitigated?
4. Is the diagnosis correct?
5. Do they show for follow up?

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