

#### Case-Based Discussion Sessions:

## The PFT Challenge



#### **Disclosure Slide**

- Presenter A
- Speaker, Boehringer Ingelheim/Phizer (Tiotropium)
- Presenter B
- Speakers Bureau: Merck
- Presenter C
- None



# PFT CHALLENGE CASE #I



#### **Learning Objectives**

- At the end of this session, you will be able to:
- List unusual causes of wheezing
- Recognize the clinical presentation of subglottic stenosis
- Etc.

Specific objectives help you create a targeted presentation, and learners walk away with concrete, measurable knowledge.

(NOTE: you don't have to give away the diagnosis before the case presentation as we did here)



#### 40 year old woman

- History of "childhood asthma"
- Mild dyspnea with exercise
  - Occasional post-viral wheezing
  - Symptoms controlled on ICS/LABA
- Evaluated pre-op for elective tubal ligation
- Physical exam normal
- PFTs obtained

Case presentation: short and to-the-point.



### **Office Spirometry**

- FVC 4.1 L (100%)
- FEV<sub>1</sub> 3.5 L (96%)
- FEV<sub>1</sub> / FVC 77%
- FEF 25-75% 3.88 L/sec (102%)
- FEF 50% 2.3 L/sec
- FIF 50% I.7 L/sec
- FEV<sub>1</sub> + 8% with bronchodilators

An image would liven up this slide, even just a flow volume loop



### **Question** I

- Insert question here
- Answer A
- Answer B
- Answer C
- Answer D

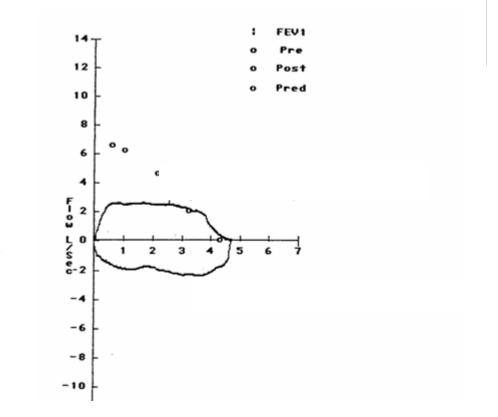
2-3 questions per case usually works well

The IT experts will convert your questions into the Audience Response formatall you need here is the question and answer choices with the correct answer highlighted



## Answer: D (FIF50/FEF50 < 1)

- Fixed airway obstruction
  - Strictures
  - Malignancy
  - Inflammatory disease
- Vocal Cord dysfunction
  - Adduction of anterior 2/3 of
  - vocal cords
    - Leaves 4-5mm posterior "chink"
    - Usually inspiratory (85%)
    - Bilateral (2%)

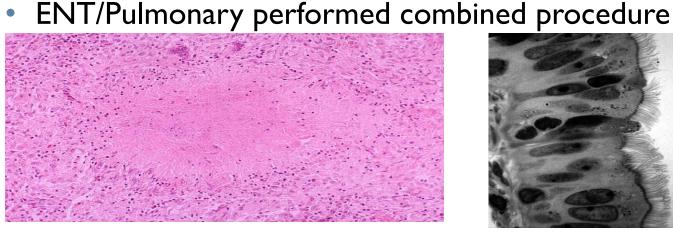




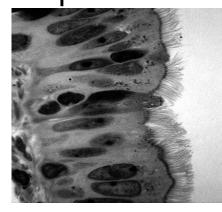
#### Patient follow-up

- At the time of surgery the ET tube could not be passed by anesthesiologist
- ENT exam revealed subglottic stenosis

If appropriate for the topic, consider including a video



Bx of trachea with geographic necrosis; Dx. Limited Wegener's



Normal endobronchial mucosa; BAL eos < 1%

Images should be large- easily seen from the back of the room



## Subglottic stenosis

#### Most common cause is trauma (90%)

- Intubation/tracheostomy
- Radiation (up to 20 years later)
- Chemical irritation
- Also seen with:
  - Gastric acid reflux
  - Chronic infection

- This is about the maximum amount of text you want on a slide. Any more than this, and your audience will be reading the slide rather than listening to you
- Inflammatory disease (GPA, sarcoid, relapsing polychondritis)

Curr Opin Otolaryngol Head Neck Surg 2003;11:467–472.



#### Additional References

- Reference I
- Reference 2
- Reference 3

A few carefully chosen references, whether key recent publications or good topic reviews, will encourage learners to continue their education after your session