#### ASTHMA MEDICAL CHALLENGES

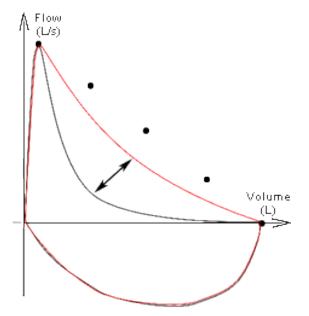
Donny Wong Respiratory Physician 23<sup>rd</sup> February 2019



## CASE 1

- 22 yo  $\vec{\sigma}$  multiple asthma attacks attending hospital with no intubations
- Non-smoker, uses prn Ventolin and Seretide scripts given regularly
- Discharged each time with oral steroid course and scripts
- In clinic, spirometry obstruction, normal post Ventolin.

• What does this mean?



### COMPLIAN

CE

- Inhaler techniques,
  - difference between pressure and powder devices
  - spacer use
  - following <u>instructions</u>





# COMPLIAN

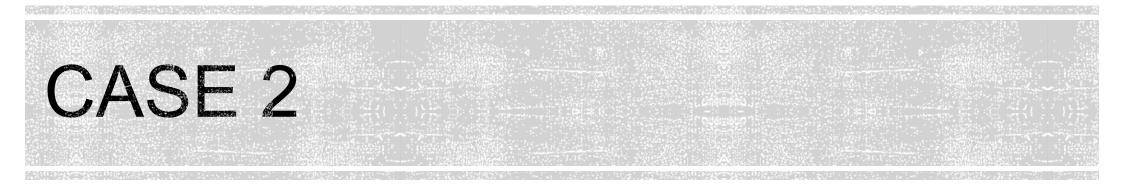
#### Inhaler techniques,

- difference between pressure and powder devices
- spacer use
- following instructions
- Understanding inhalers, relievers vs preventers
- Control of disease ACT (https:// www.asthmacontroltest.com)

All of the time	1	Most of the time	2	Some of the time	3	A little of the time	4	None of the time	5	
2. During the p	ast <b>4 we</b> i	e <b>ks</b> , how often	have you l	had shortness o	of breath?					
More than once a day	1	Once a day	2	3 to 6 times a week	3	Once or twice a week	4	Not at all	5	
		,		<b>thma</b> symptoms ual in the morn		g, coughing, sh	ortness of	breath, chest	tightness	
4 or more nights a week	(1)	2 or 3 nights a week	(2)	Once a week	(3)	Once or twice	(4)	Not at all	5	
-	~	u woon	$\sim$		$\bigcirc$	OF TWICE	$\mathbf{\nabla}$			
4. During the p	ast <b>4 we</b>		have you	used your rescu		or twice or nebulizer me		such as albu		
4. During the p 3 or more times per day	ast <b>4 we</b>		have you	used your rescu 2 or 3 times per week				such as albu Not at all		
3 or more times per day	1	eks, how often 1 or 2 times per day	2	2 or 3 times	ue inhaler	or nebulizer me Once a week	dication (		terol)?	
3 or more times per day	1	eks, how often 1 or 2 times per day	2	2 or 3 times per week	ue inhaler	or nebulizer me Once a week	dication (		terol)?	

If your score is 19 or less, your asthma may not be controlled as well as it could be. Talk to your doctor.

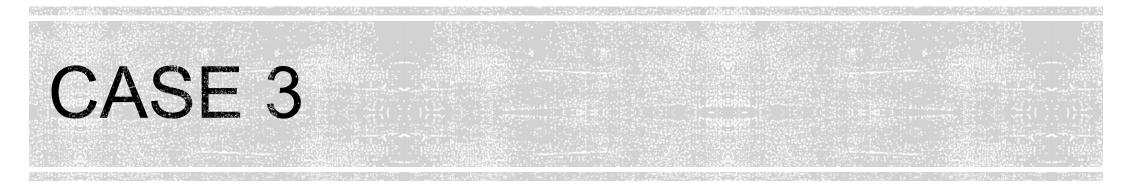




- 16 yo ♀ with asthma and...
  - Food allergy of egg, peanut and kiwi fruit, has EpiPen use.
  - Eczema
  - Allergic rhinitis, skin prick test positive to house dust mite, cat, dog, grass.
- Maximal tx, eye drops, antihistamines, montelukast
- Poor symptoms control
- BUT NOT been using her inhalers though as don't believe in it
- Spirometry was only mildly obstructed in clinic was better but still had symptoms
- What to do?

#### IT IS ALL ABOUT THE TRIGGERS

- Avoiding aeroallergen triggers, hard to do
- Hay fever management and role of montelukast
- Reflux management.
- ?Densitisation

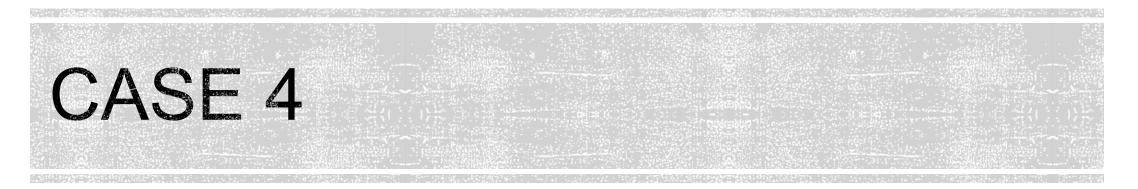


- 42 yo with childhood asthma with serum eosinophilia and atopy history
- Also heavy current smoker and ex marijuana use
- Spirometry still obstructed even after good doses of ICS/LABA,
- After oral steroids spirometry does not return to normal
- CT confirms emphysema

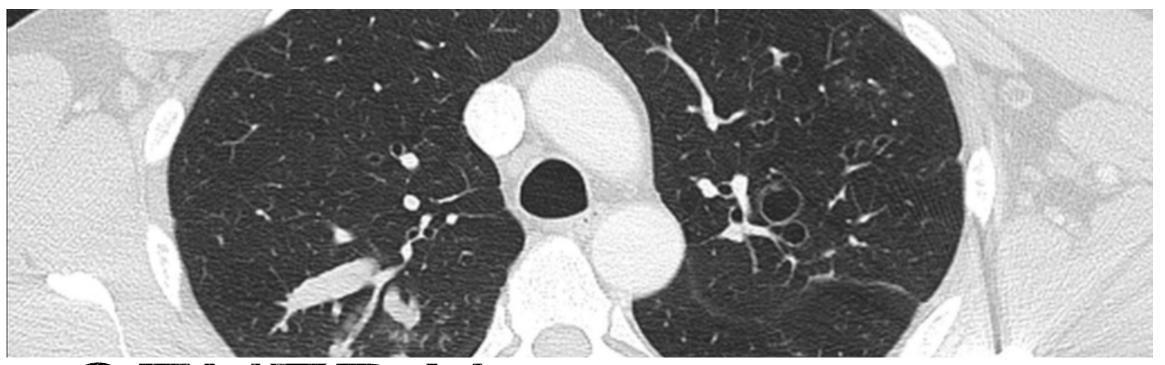
• So treat as asthma or COPD?

#### ASTHMA & COPD **OVERLAP** SYNDROM E (ACOS)

- Manage as both asthma and COPD.
- Don't stop ICS ever due to asthma
- Give LAMA for COPD.



- 51 ♀ recent migrant South Africa, known asthma with progressive breathlessness with mucus plugs. No steroids given
- Background hay fever, atopy and ex social smoker with no occupational exposures
- CXR: diffuse opacities
- What is it?
- Ix, high total IgE, +ve Aspergillus RAST & precipitins and eosinophilia
- CXRs showed improvement on treatment with no bronchiectasis



#### CENTRAL BRONCHIECTASIS

Case courtesy of Dr Ben Hudson, Radiopaedia.org, rID: 61966



#### ALLERGIC BRONCHOPUL MONARY ASPERGILLOSI S (ABPA)

- Type of allergenic fungal airways disease
- Asthma and CF with recurrent exacerbations
- Bloods to do, CBC, Total IgE, Aspergillus RAST/ precipitins.
- Tx: Steroids +/- Antifungal

#### SUMMARY OF THEMES

01

Compliance, technique and understanding 02

Triggers: aeroallergen, reflux, other atopy disease 03

Concurrent COPD: for triple inhalers

#### 04

Recurrent exacerbations with plugs think ABPA



