



Bronchiectasis

- Abnormal chronic dilation of one or more bronchi.

- Usually premature or childhood lung disease.
- If insult was small, then later in life they develop phlegm.
- If insult was big, then in 40's.
- If insult was massive, then all their life.

- Severe whooping cough.
- Chickenpox.
- TB.
- Pneumonia.

Disclaimer:
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References:
1. Respiratory consultant Walsall Manor Hospital, Jan 2018

Symptoms

- Purulent sputum.
- Persistent cough which doesn't shift with Abx.
- Commonly chest clear.
- Might be clubbed.

- Sputum can be intermittent i.e. just because they are not coughing out phlegm daily, doesn't mean its not bronchiectasis.
- Asthmatics usually have yellow phlegm due to esinophils.
- Sputum volume and colour is key.
- If green think bronchiectasis.
- If in night and morning think bronchiectasis.
- COPD does not make massive amount of phlegm. In bronchiectasis they can fill up > 1 sputum pot.
- Be aware, pt can have both pre existing COPD and then develop bronchiectasis.

i.e. examinaiton may be unhelpful.

Investigations

1o care

- Sputum MCS.
- Spirometry.
- CXR.

- The result of the sputum is for the future.
- Some laboratories do not routinely report ciprofloxacin sensitivity on the screen, due to concerns about c.diff if used. But you could ring the lab to see if they have that sensitivity at their end.

- Is not diagnostic, but may guide treatment.
- Can be obstructive, restrictive or mixed.
- If obstructive, there is a role for bronchodilators.
- If restrictive, bronchodilators unlikely to help.

- Commonly normal.

2o care

- HRCT thorax.
- Total IgE.
- Aspergillus RAST test.
- Aspergiullus precipitants.
- Total immunoglobulins.
- If mod/severe or frequent exacerbations, functional antibodies to pneumococcus, haemophilus and tetanus.

- Total Ig and electrophoresis to exclude comon variable immunodeficiency.
- Total IgE , if > 1000 think ABPA. If normal and not on steroids it rules out ABPA.
- Aspergillus specific IgE to exclude ABPA.

- If low need booster vaccination.

Management

Education

- British Thoracic Society PIL about bronchiectasis.
- Buy OTC multivitamin.
- Eat healthy diet.
- Flu jab annually and pneumococcal (give again if low Ab levels).
- Chest physiotherapy and sputum clearance techniques. Use of flutter devices.
- Sputum monitoring.
- Keep well hydrated. If dehydrated it will make phelgm dryer and sticky.

Exacerbation

- If well and have sputum ↑ vol and change in colour, then no Abx needed.
- If unwell with those 2 changes then give Abx.
- Can give prednisolone 30mg for 7/7 and Abx for 14/7.
- Dont give prednisolone if pt states it doesnt work for them.
- Ensure you treat before sputum MCS results are back.
- Can provide rescue packs.
- Lower threshold for Abx in bronchiectasis.
- Stop the prophylactic Abx (e.g. azithromycin) while giving acute Abx, then restart once the acute Abx has finished.

Prophylaxis

- Carbocisteine. Dont use if no phlegm. Can use PRN.
- If ≥3 exacerbations per yr consider prophylactic Abx (e.g. azithromycin, trimethoprim) in peak season of their exacerbations, or can continue throught the yr if they are exacerbating through the year.
- Peak season for most is Oct to March = give azithromycin 3 x per week.
- It is an immuno modulator and Abx. Can make a huge difference in bronchiectasis.
- Stop the prophylactic Abx (e.g. azithromycin) while giving acute Abx, then restart once the acute Abx has finished.

Maintenance

- Try steroid ICS + LABA trial.
- If breathlessness is a feature treat with asthma meds as well.