

Mr Grimshaw's hobby

You are coming to the end of a busy afternoon in surgery when the receptionist phones through and asks if you would see one last patient. You recognise the name, although you haven't seen him for a while now, and agree. While you are waiting for him to come in, you pull up his notes on your computer to refresh your memory. Yes, that's it – you first saw him about 3 years ago, soon after he'd retired and taken up a new hobby. At that consultation, he'd been complaining of a cough and a shivery chill. You recall that you felt quite pleased with yourself at the time, for asking the right questions and doing the right tests and not just assuming he had flu.

When the data came in and the diagnosis was confirmed, you'd given him some lifestyle advice. You saw him a year later and his declining FVC still hadn't persuaded him to take your advice. You haven't seen him since and just as you are wondering how things turned out, Jack Grimshaw shuffles slowly into your office, breathing as if he had just run a marathon. He drops heavily into a chair. "I just can't get my breath these days doc - I can hardly get up the stairs. Those pills you've been giving me are rubbish – I'm taking twice what you said and look at the state of me – swollen up like a damn balloon and just as breathless as ever! I want you to give me something that works this time or I'm going to see that nice Dr Maha-wotsername next time. I bet she'll sort me out right."

Exhausted by his tirade, he looks at you expectantly. As you reel from the injustice of this, you take a deep breath and, making a supreme effort to keep your tone pleasant and non-judgemental, you ask your first question. "You didn't take my advice to get rid of the birds then?"

What are the tests the GP would have used to make his initial diagnosis?

What are the drugs that he is prescribing?

What changes are happening to Jack's lung function and why?

Mentor notes

Jack has pigeon fancier's lung, which is a hypersensitivity reaction caused by repeated exposure to antigens in bird "bloom"- the dust on bird's feathers, but also in droppings in the pigeon loft. It can

be caused by keeping any birds, not just pigeons, but is worse where animals are kept in crowded conditions and during the moulting season, for obvious reasons. This condition can also be caused by the inhalation of other organic dusts and fine particles such as fungal spores. The typical acute presentation is that of flu like symptoms – headache, aching joints, fever, dry cough – a few hours after contact with the antigen.

The diagnosis is made by taking a good history – is this a recurrent problem? – if so, are there any obvious triggers? Any new hobbies? Any new work? Persistent use of hot tubs or any water damage to the patient's house, which might result in mould? Raised serum antigen-specific IgG is a non-specific marker (as antibodies can be raised in people with no symptoms). There may be visible changes on X-ray or CT scan and inspiratory crackles on examination. As the disease progresses, spirometry shows a fall in vital capacity and FEV1, but the FEV1/FVC ratio remains normal indicating restrictive disease.

Once the diagnosis is made, some people can control the problem by wearing a mask and other protective clothing when handling the birds and especially when cleaning out the pigeon loft, but in others the disease progresses unless they cease contact with birds. In the case of progressive disease, inflammation in the peripheral lung leads to the laying down of scar tissue and this fibrosis acts like a corset to restrict the full expansion of the lungs – this is why vital capacity declines. Unlike asthma, the problem is getting air into the lungs, not getting it out – it is a restrictive lung disease.

Glucocorticoids can reduce the inflammation and slow the progression of the disease, although in severe, chronic disease they may be ineffective. As Mr Grimshaw has discovered, when taken in excess, they cause many side effects, including fluid retention (due to the fact that glucocorticoids can stimulate aldosterone receptors in the kidney).

Mr Grimshaw's response to getting advice from the doctor he doesn't want to hear is not that unusual – rather than taking the advice, he will change his doctor!