UNIVERSITY OF CAMBRIDGE SCHOOL OF CLINICAL MEDICINE

Chest infection - hospital bedside – simulated patient role 1

Name: John or Joan Henderson **Age**: Your own age

Setting

You are sitting next to your bed in a medical ward at Addenbrooke's at three in the afternoon, feeling pretty shattered but glad to be resting. You have a cannula in a vein in your left forearm that was put in a few hours ago and through which the nurses have given you an intravenous injection of antibiotics. You are wearing only a nightie or pyjamas but it still seems hot. You have a nasty cough, you feel tired and a bit short of breath if you do anything but are reasonably OK just sitting there. It hurts over the front of your chest but only if you take a deep breath or if you move suddenly. The nurses have given you some tablets for the pain. It took a long time to get processed when you came into the admissions ward: although you were seen quite quickly, you were asked questions by several doctors and nurses and had to have blood tests an this d be sent to X-ray. Eventually, you were transferred up to this ward. Everyone has been very nice to you but it's pretty bewildering and tiring. You are just beginning to settle down and get your bearings. You haven't seen a doctor since getting to this ward, but one nurse has introduced herself as your key nurse.

You were admitted to the hospital via your GP this morning. You rang up and got an urgent appointment and your husband or wife took you to the surgery in the car. When you saw the doctor, she was really quite worried about what she could hear in your chest and said that she wondered if you had a patch of pneumonia. She felt it would be best if you went up to the hospital for an X-ray and that they might well keep you in. You were quite surprised as although you felt poorly, you had been struggling on bravely. You've felt worse since you started to think you really might be ill!

Clinical details

You are normally pretty fit and well. Over the last few days, you began to feel poorly with a temperature and a cough. Yesterday, you began to feel worse with a sharp momentary pain at the front of your chest, sort of on the left, which came on when you took a deep breath or moved suddenly. Last night, you felt a little short of breath and began to cough up a little green-yellow phlegm. Some of it you noticed was tinged with a rusty colour which you thought might be blood - it tasted like it. That and the pain is what made you go to the doctor. You haven't got a wheeze. In the night, you had an episode when you couldn't stop shaking for half an hour and you keep on feeling alternately hot and cold and sweaty.

Past medical history

Any previous operations: tonsillitis when you were a child
Any previous illnesses: not really, generally pretty fit, the odd cough and cold

Medication

Any medication taken for this: paracetamol for the pain
Are you on any prescribed drugs such as the pill: no

Family history

Any family history of

heart disease: father has angina, developed when he was 60
chest disease: father also has a bit of chronic bronchitis, he's a bit wheezy, he smokes too
cancer: no
serious illness: no

Smoking: used to smoke 20 a day but reduced to 5 a day over the last year, can't quite give up

Alcohol: moderate only

Social history

You are married with two children (unless your age doesn't fit)
Occupation: office worker, please concoct a suitable job
Previous occupation: similar
Where do you live: in a Cambridge suburb
Type of housing: own semi-detached
Social class: middle
Pets: two cats
Travel: no recent foreign travel

Temperament: Pretty calm normally – it's your spouse who gets anxious

Patient's framework

- **ideas and thoughts**

what did you think might have caused your problem: smoking won't have helped you guess
what have they told you so far: X-ray person said there was a patch on your lung – what the hell is that?

- **concerns**

what are you concerned about: getting home – your spouse hates hospitals and is really anxious: his/her mother died in rather difficult circumstances in Addenbrooke's a year ago
have you any underlying fears: lung cancer, although you think that's unlikely really, it does play on your mind
any practical problems: not really

- **expectations**

what are you hoping for: to get better fast
do you need anything from the medical staff: some explanation of a 'patch' – is that infection or does it mean something else; why should I get pneumonia (if that's what it is); how long will I be in here

- **feelings**

how are you feeling about it all: mostly just ill and weak, but a little concerned – it was a shock ending up in hospital but glad to being sorted out

- **effect on life**

what effect is this having on your life: sudden disruption, a bit bewildered

Presenting symptom(s) or problem(s)

If the medical student asks you "what problems brought you to the hospital", will you answer:

- 'well, they say I've got pneumonia' or
- 'I've got a cough and a bit of chest pain' or
- start to tell the story from the beginning

whichever you choose, don't mention all the symptoms straight off - mention the one or two that seem most important to you but leave out say the shortness of breath and tiredness or the shaking. If subsequently asked 'have you noticed anything else', then fill those in.

Behaviour: The patient needs to be a bit short of breath although not much just sitting there, although movement causes a little pain. Don't worry about getting everything 'right' – real patients forget their symptoms and get things in the wrong order too! It also doesn't matter if the detail changes from what is written here. But it is important though to be consistent from role-play to re-role-play.

Clinical Reasoning

Symptoms:

- Cough: with sputum green/yellow phlegm
- Slightly 'rusty' colour in sputum ? blood
- Temperature with rigors
- Tired
- Short of breath
- Pleuritic chest pains
- Smoker
- No recent foreign travel
- Office worker
- 2 cats only pets

System: Respiratory

Chest Infection/ Pneumonia:

This patient presents with a temperature, associated rigors and feeling tired - this demonstrates an infective process is going on.

As infection develops in the lung, sputum production which is a mixture of normal secretions with associated pus, increases in volume. The colour of the sputum is a useful guide although not diagnostic to the pathogen causing the infection. It is felt that a clear or white sputum indicates a viral infection whilst a green-yellow sputum is more typical in a bacterial infection. A rusty type sputum may indicate a pneumococcal infection or haempotysis (blood in sputum) may point towards a TB infection.

Other non infective process within the chest may also cause secretions/ sputum production. e.g. heart failure may present with a clear/pinky sputum whilst lung cancers can also produce haemoptysis. However in these conditions, due to the lack of an infective process, the patient would not have associated temps and rigors.

Pleuritic chest pains indicate that the pathology has reached the pleura as the lung tissue itself has no pain fibres. This demonstrates a significant chest infection i.e. a pneumonia or may indicate other pathology such as a pulmonary embolus although again our patient would not be showing signs of infection.

It is important to remember that although the diagnosis here is likely to be a pneumonia, there may be underlying factors that has made him/her more prone to developing this condition and these should be actively sought e.g. lung cancer especially as the individual is a smoker. It would be useful to also determine if they have any other 'red flags' such as weight loss etc.