

## Middle-aged blues? (answers on page 57)

### Part one

Rose, a 51-year old woman, suddenly became breathless and distressed while sitting at home. This was her first episode of dyspnoea, and it came as a shock to her, as she had been healthy all her life. Her only visits to hospital were for her three confinements when in her 20s, and then for a prolapse repair 3 months before. She was not obese, as she lived an energetic lifestyle, combining looking after her grandchildren and a smallholding. Her daughter and son-in-law had both died of AIDS, and her husband had left the family home many years before.

Her 8-year-old granddaughter alerted the local nurse, who immediately sent her to the local hospital 2 miles away. When she arrived she was breathing shallowly, but not wheezing, at around 30 breaths a minute, her heart rate was over 130 per minute, and her lips were slightly blue. She had an under-tongue temperature of 38.5°C.

**Q1 What would you consider as among the likeliest diagnoses?**

- (a) AIDS-related atypical lung infection. (b) Sudden onset of asthma.
- (c) Tuberculosis. (d) Staphylococcal or pneumococcal pneumonia.
- (e) Venous thromboembolism. (f) Acute pneumothorax.

### Part two

Rose was a non-smoker and non-drinker, living as healthily as she could under her straitened circumstance. Asked if she had any other symptoms, she could only say that she had often had a dull ache in her lower abdomen, but it was not related to her pattern of micturition or defaecation. She was taking no medication, either prescribed or of her own volition. The immediate X-ray showed particular findings that strongly suggested her diagnosis.

**Q2 What would you have expected on X-ray?**

- (a) Patchy shadowing throughout both lungs.
- (b) No focal lesion, but over-expansion of the chest with reduced lung markings.
- (c) A collapsed lung with lack of lung markings on that side and the heart displaced to the opposite side.
- (d) An apical lesion.
- (e) A section of the lung fields with diffuse shadowing, affecting one or two lung lobes.

### Part three

One of these five appearances was confirmed, and Rose was started on treatment. She was found to have a high d-dimer reading, and giving bronchodilator and steroid inhalers did not improve her breathing.

**Q3 Which of the following treatments was she most likely to have?**

- (a) Surgery to release the increased pressure. (b) Broad spectrum antibiotics.
- (c) Emergency anticoagulant therapy. (d) Antitubercular therapy.
- (e) More intensive anti-asthma therapy.

### Part four

**Q4 Which of the following statements are true of Rose's condition?**

- (a) Without a wheeze, this is unlikely to be asthma.
- (b) The sudden onset with no previous illness rules out an atypical pneumonia due to AIDS.
- (c) A raised d-dimer points strongly to venous thromboembolism.
- (d) The fact that she developed the breathlessness 3 months after pelvic surgery rules out any connection between thrombosis and the operation.
- (e) Even 12 weeks after pelvic surgery the risk of post-operative venous thromboembolism in 50-64-year old women is still around 20 times that in women of the same age who have not had surgery.

### Part five

Rose slowly recovered in hospital, and was discharged home a week later, breathing normally.

**Q5 Given that she may have had a thromboembolism (I don't want to give the diagnosis away yet!) which of the following statements are true?**

- (a) Relative risks for venous thromboembolism (against women without surgery) are 70 in the 6 weeks after inpatient surgery and 10 after outpatient surgery.
- (b) They are still raised well beyond 3 months.
- (c) Women at most risk of thromboembolism have had operations for cancer, and hip or knee joint replacement surgery.
- (d) The peak time for thromboembolism is in the first 10 days after surgery.
- (e) Doctors should be alert to the possibility of thromboembolism in their post-operative female patients for at least 8 months after surgery.