

## Case 100 A sinister break

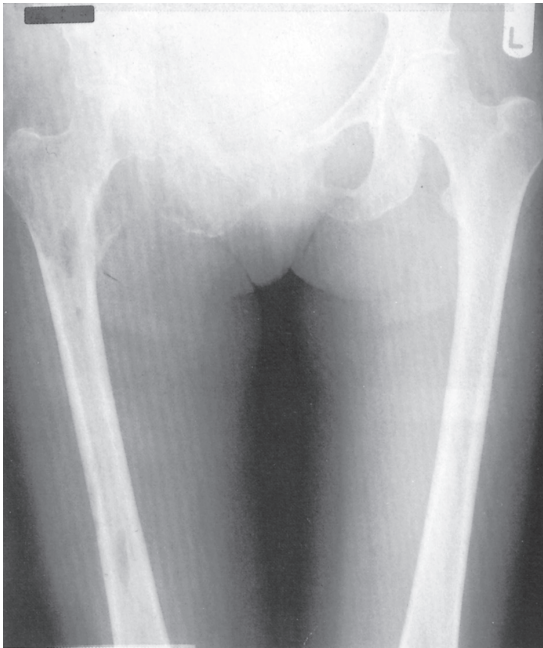


Figure 100.1

*The woman described in Case 99 continued to be followed up by the oncologists and she remained well. However, 18 months after first being seen in the breast clinic, she suddenly developed severe pain in her right hip while out walking, her hip gave way and she fell down in the street. She was brought to hospital by ambulance. The X-ray taken in the Emergency Department is shown in Fig. 100.1.*

### Describe the lesion you can see on this X-ray

There are extensive lytic lesions seen in the right femoral neck, the trochanters and the femoral shaft. Further lytic areas are seen in the right pubis, where there is a pathological fracture of its upper ramus. Smaller areas of lysis

are seen in the pubic bone on the left side.

### What would be your diagnosis?

Osteolytic secondary bone deposits from the initial carcinoma of the left breast, with a pathological fracture.

### Where else are bone secondary deposits found – and why is this?

Bony deposits occur at the sites of red bone marrow, which is highly vascular. These sites are the vault of the skull, the vertebral bodies, the ribs, sternum and upper end of the humerus as well as the pelvis and upper end of the femur, as has occurred in this patient.

### What other primary tumours commonly spread by the blood stream to bone?

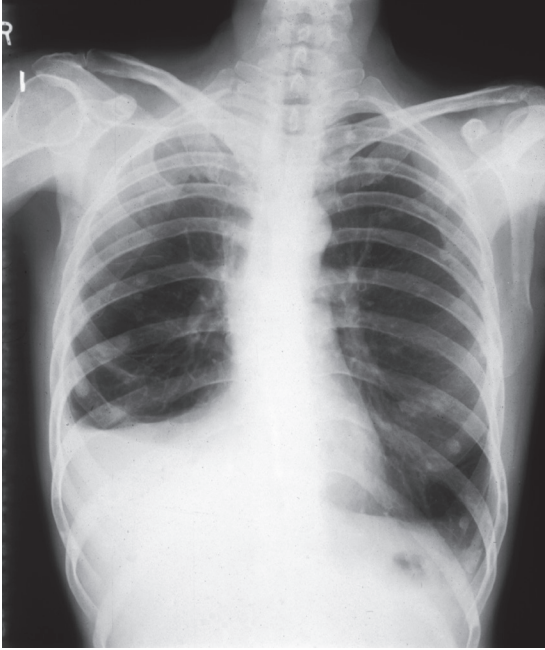
In the male, lung carcinoma is the commonest tumour to spread by the blood stream, followed by prostate (see Case 116, p. 241). In the female, breast carcinoma is commonest, followed by lung. These are the cause of the majority of cases of bone secondaries in practice. Secondary deposits to bone may occasionally be found in patients with carcinoma of the kidney and thyroid. Apart from these five tumours, bone deposits from other cancers are rare.

### As part of her further investigation, a chest X-ray was performed (Fig. 100.2); there were no chest symptoms but clinically there was dullness at the right lung base.

#### What does the X-ray show ?

There is an obvious effusion at the right lung base, with the typical appearance of a pleural fluid collection. Numerous opacities are seen in both lung fields, suggesting lung secondary deposits.

## Part 2: Cases



**Figure 100.2** Chest X-ray.

*Aspiration of the right pleural effusion produced yellow fluid. Malignant cells were identified on its cytological examination. Cytotoxic therapy was commenced but the patient showed no response to this; indeed, the treatment was discontinued because of severe toxicity. She was transferred to the local hospice and died peacefully 2 months after her fall.*