Case 107  A rapidly enlarging mass in the neck

Figure 107.1 is of an 80-year-old woman who presented with a rapidly enlarging mass in the neck. She had only noticed this a couple of months ago, but she confessed that she was not a very good witness. For the last 2 weeks her voice had become weak, so that she could now only whisper. She was now having difficulty swallowing solid food, which seemed to stick in her throat, although liquids went down fairly well.

On examination she was a thin, frail old woman. There was a hard, tender, nodular mass, which definitely moved on swallowing. It occupied the front and lateral aspects of the neck, more on the right than the left. There was a mass of enlarged, hard nodes to feel in the right posterior triangle. There were no other relevant findings apart from what might be expected in a woman of this age – varicose veins, arthritic knees and fingers and a blood pressure of 180/100 mmHg.

The clinical diagnosis is pretty obvious; what is it?
This is a malignant mass in the neck with lymph node metastases. It moves on swallowing, so it is a carcinoma of the thyroid gland.

Why has she recently lost her voice?
This must have been due to involvement of the recurrent laryngeal nerve, probably on the right side.

How would you confirm this?
The vocal cords should be inspected by laryngoscopy. This can be done easily and painlessly using a local anaesthetic spray and a fibreoptic laryngoscope. The paralysed cord will be immobile when the patient attempts to phonate.

What is the likely histological appearance of this thyroid tumour, and why is this anomalous when compared with tumours at other sites?
Rapidly enlarging thyroid tumours in the elderly are usually anaplastic carcinomas. This is the reversal of the state of affairs in other organs, in that the more malignant tumours of the thyroid gland occur in older age groups; for most tumours elsewhere in the body the more malignant tumours affect the younger age groups.

What treatment might be possible in the case of this old person?
This extensive tumour is already invading the recurrent laryngeal nerve (hence the loss of voice) and is beyond treatment by radical thyroidectomy. Radiotherapy to the neck may give temporary relief and a tracheostomy may eventually be required for obstruction of the airway.