

Case 106 A mass of cervical lymph nodes



Figure 106.1

A 36-year-old divorcee, working as a clerk in the local tax office, noticed a lump in the right side of her neck about 2 months previously. The lump was painless and not tender to touch, but it gradually enlarged. In her past history, she had been treated 2 years ago for *in situ* carcinoma of the cervix after a positive smear test. She had never had children. There were no other relevant features in her history.

On examination, she was a healthy woman with no anomalies to find apart from an obvious collection of enlarged, rubbery-firm, non-tender lymph nodes in the right anterior triangle of the neck, which extended forward from deep to the sternocleidomastoid muscle.

A chest X-ray was normal. After biopsy of one of the nodes, she was submitted to a block dissection of the right cervical lymph nodes, together with the internal jugular vein, and removal of the right lobe of the thyroid gland. The right recurrent laryngeal nerve was identified and carefully preserved. Figure 106.1 shows the lymph nodes, together with the opened right lobe of the thyroid gland.

What does this specimen demonstrate?

There is a small white nodule of tumour in the upper pole of the thyroid gland. The chain of lymph nodes are greatly enlarged and must obviously have been invaded by secondary deposits.

What is the likely pathology of the white nodule of tumour in the upper pole of the thyroid gland?

A papillary carcinoma of the thyroid may typically metastasize to the cervical lymph nodes. Occasionally the primary tumour may be small and indeed impalpable – only a careful search of the specimen will reveal what usually proves to be a well differentiated tumour. The typical appearances are shown in Fig. 106.2.

In the past, these deposits in the chain of cervical lymph nodes were mistakenly thought to arise in ‘lateral aberrant thyroid tissue’. However, a careful search will reveal, as in this case, a small focus of primary tumour in the ipsilateral lobe of the thyroid gland.

This woman had a papillary carcinoma, the commonest type of thyroid cancer. It accounts for about 60% of cases and occurs in young adults, adolescents and even children. It is usually slow growing and has a good prognosis. What are the other types of primary carcinomas of the thyroid?

- *Follicular*: Usually in young and middle-aged adults. It is particularly found in areas where goitre is endemic.

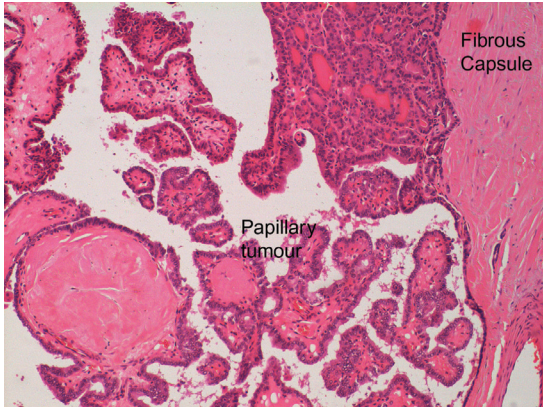


Figure 106.2 A papillary carcinoma of the thyroid (magnification $\times 20$, haematoxylin and eosin stain).

It tends to spread by the blood stream rather than the lymphatics, so its prognosis is worse than the papillary type.

- *Medullary*: This arises from the parafollicular C-cells and may secrete calcitonin. It may occur at any age, be

familial and be associated with the multiple endocrine neoplasia type 2 (MEN-2) syndrome, associated with pheochromocytoma and either parathyroid tumour or multiple neurofibromas. The characteristic histological finding is of deposits of amyloid between the nests of tumour cells.

- *Anaplastic*: Usually found in elderly patients (see Case 107, p. 224).
- *Thyroid*: Lymphoma sometimes arises within the thyroid.

What is the sex distribution of thyroid carcinomas?

Medullary carcinoma has a roughly equal sex distribution, whereas the other tumours affect females twice as often as males.

What is the blood stream spread of thyroid cancers?

When haematogenous spread occurs, this is typically to the lungs and the brain. It is one of the tumours that may metastasize to bone (see Cases 100 and 116, pp. 207 and 241).