



FIG. 6. Case 10. Pleural tumour. The central cells are spindle-shaped but still show vesicular nuclei and eosinophilic nucleoli. Haematoxylin and eosin, $\times 750$.

The cells of the 'fibrous' types are spindle-shaped with oval nuclei arranged with longitudinal axes parallel to those of the cells. The oval nuclei are often vesicular, and prominent eosinophilic nucleoli are common (Fig. 6). The cells are also in parallel, loosely arranged in indistinct fascicles that gently fuse into each other, unlike the angled intersections of the leiomyosarcoma or fibrosarcoma. On transverse sections the fascicles are often clearly rounded and slightly whorled. Occasionally the cells are arranged parallel to the surface of the underlying viscus with little or no fasciculation.

Reticulin fibres surround these cells in a closely woven meshwork of thin strands, and occasionally the fibres are thick, dense, and brown. The latter are found in acellular, hyaline areas, which are common in these tumours. Mitoses are uncommon, but a few tumours show areas of pleomorphism with tumour giant cells and frequent mitoses. Figure 7 shows the histology of a fibromatous tumour with abundant collagen formation.

Tumours of this fibromatous type were described by Klemperer and Rabin (1931) as forming a localized mass in the serosal space, but all my cases showed diffuse involvement of the pleura or peritoneum. One case showed a large mass in addition to diffuse involvement of the pleura.

Both epithelial and fibromatous elements were found in 41% (14 cases), and both types might be found in the same microscopical field (Fig. 12) in the same anatomical area or in different sites of tumour (Figs. 8 and 9). All lesions in bone (direct invasion of vertebrae or ribs) were fibromatous in type (Fig. 8), often with epithelial type in all other lesions. Metastases in lymph nodes were usually of epithelial type irrespective of the type of the primary tumour (Fig. 9). It is possible that the structure of the organ may affect the histological appearances of the tumour.

In contrast to mesothelioma, when a carcinomatous metastasis is present in bone, it is frequently 'scirrhous', that is it shows a fibrous

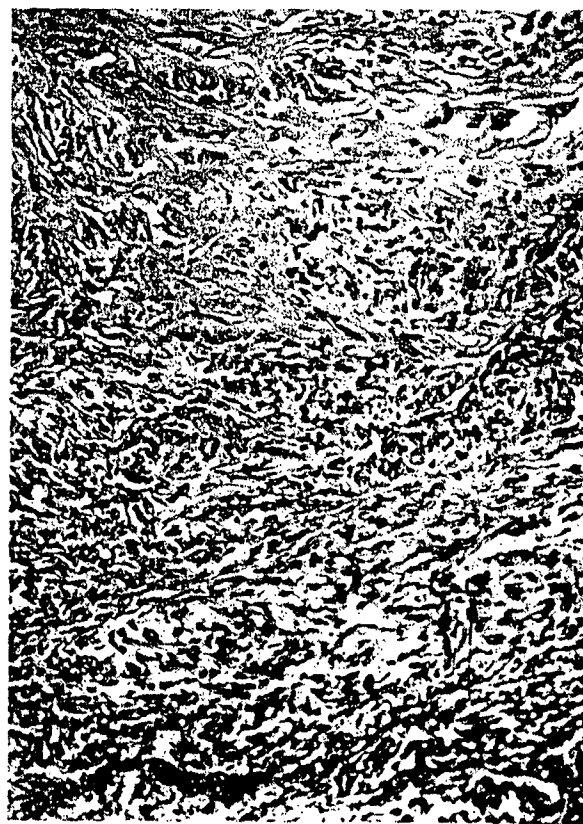


FIG. 7. Case 5. Fibromatous pleural tumour. Collagenous tissue at top of photograph. Inflammatory cells at bottom. The similarity of this area to benign pleural thickening (Fig. 11) is striking. Haematoxylin and eosin, $\times 110$.