The Salivary Glands
2. Tumours

Classification

Tumours of the salivary glands may be classified as follows:

Epithelial Tumours

Adenomas
- Pleomorphic adenoma
- Monomorphic adenoma
- Adenolymphoma
- Oxyphilic adenoma
- Other types

Mucoepidermoid tumour
- Acinic cell tumour

Carcinomas
- Adenoid cystic carcinoma
- Adenocarcinoma
- Epidermoid carcinoma
- Undifferentiated carcinoma
- Carcinoma in pleomorphic adenoma

Non-epithelial Tumours

The non-epithelial tumours of the salivary glands have the same classification and terminology as comparable tumours elsewhere in the body.

The minor glands are less often the site of neoplasms than the major glands, but practically all the varieties of salivary gland tumours can affect both groups of glands, although the proportions are rather different. In the minor glands there are relatively more carcinomas and fewer adenomas than in the major glands, and some of the less common tumours of the major glands are distinctly uncommon or rare in the minor glands. However, the differences are not such as to allow the pathologist to neglect the possibility of any of the tumour types arising in any of the glands.

Pleomorphic Adenoma

This is the commonest tumour of both major and minor glands and has its most frequent location in the parotid and in the glands of the palate respectively. If the tumour has been removed entire with a margin of normal tissue it will be seen to have a complete fibrous capsule, although this may be quite thin in some areas, and may readily separate from the tumour. The frequency with which this artefact of histological preparation is seen reflects the ease with which the capsule may separate from the tumour during surgical removal if suitable procedures are not adopted. The capsule may also contain apparently separate islets or nodules of tumour.
but these are outgrowths from the main tumour mass with which they can be shown by serial sections to be connected at some other point (Figures 8.3 and 8.4). The presence of a capsule is an important diagnostic feature, since a growth that is unencapsulated or only partially capsulated will be something other than a primary (that is, previously untreated) pleomorphic adenoma, although the general cellular pattern may have suggested that diagnosis on preliminary microscopical examination. If the tumour has been removed piecemeal or has been sent to the laboratory in that state, then the capsular feature is unlikely to be discernible and the cellular appearances alone will have to be relied upon.

Microscopically, a typical pleomorphic adenoma consists of epithelial cells arranged in strands, sheets and duct-like structures in a mucoid or myxochondroid background, but there are many variations of this pattern with differing proportions of the cellular and the mucoid or myxochondroid elements (Figure 8.5). When all or most of these elements are present in a tumour diagnosis is not difficult, but when one element preponderates this may be less easily accomplished. The ducts are often similar to those of normal salivary gland, with an inner layer of flattened or cubical cells and an outer layer or layers of smaller often vacuolated cells. Small clumps and single cells are scattered throughout the chondroid tissue.

Squamous epithelium, often with keratinization, is frequently seen in pleomorphic adenoma (Figure 8.9). It is not usually extensive, but in the very occasional tumour a