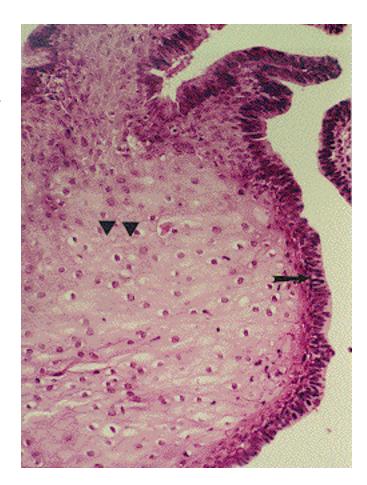
AMELOBLASTOMA

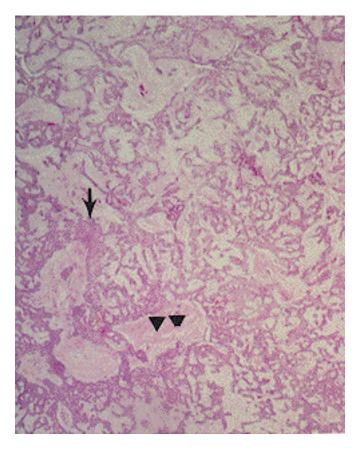
Most ameloblastomas occur in the mandible, the remainder in association with the maxilla. These are benign, cystic tumors consisting of islands of cells corresponding to the ameloblast usually encountered in tooth development. Grossly, most tumors show both solid and cystic features, but in some cysts may be seen only under the microscope.

Microscopically, the classic appearance contains columnar cells with hyperchromatic nuclei resembling ameloblasts arranged in a palisading fashion and surrounding nests of loosely arranged epithelial cells— the stellate cells of the enamel organ. Other histologic subtypes also occur, often in the same tumor, and include follicular (cystic and solid), basal cell, plexiform, granular cell, desmoplastic, and acanthomatous types.

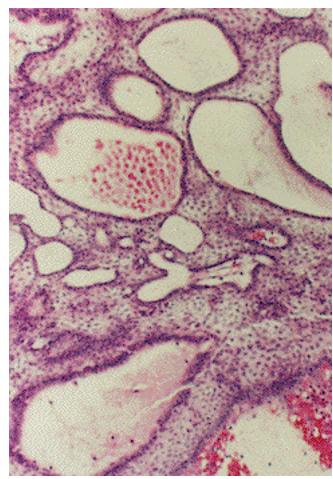
Ameloblastoma, mandibular, with a periphery of dark palisading columnar cells (arrow) typical of ameloblasts. Here the central area of the cell nest looks squamoid (triangles). The more typical reticular cells are not seen.

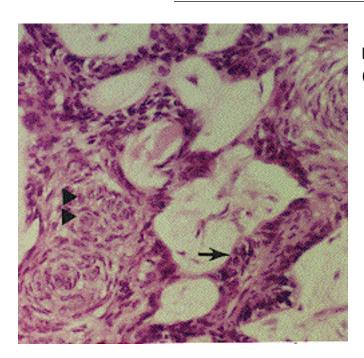


Ameloblastoma, another area of the same tumor shown in upper right demonstrates a plexiform pattern with anastomosing cords and sheets of epidermis (arrow) with breakdown in many areas to form microcysts (triangles).

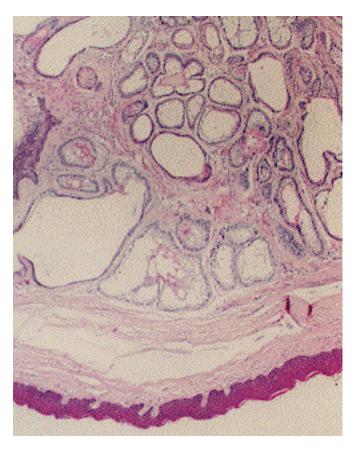


Ameloblastoma, mandibular, showing the characteristic stellate reticulum of the enamel organ around which ennameloblasts form squamoid borders.





Ameloblastoma, high power photograph of same lesion seen. Squamoid eddies (triangles) and ameloblasts (arrow).



Ameloblastoma. Tumor is seen beneath the squamous mucosa with a smooth "pushing" border.

CLINICAL ASPECTS:

The ameloblastoma radiologically produces single or multilocular radiolucencies and the X-ray appearance has been likened to "soap bubbles" replacing the bone. Resorption of the roots of the teeth adjacent to the tumor is common. Often the tumor is asymptomatic with smaller lesions found only on incidental radiography but some lesions can achieve great size. Treatment has been with a variety of methods that range from curettement to a major resection. Recurrences are not infrequent after curettage although they may be slow to evolve. The tumor, if not completely removed, continues to be infiltrative and can be life threatening. Malignant degeneration has been reported but is rare.