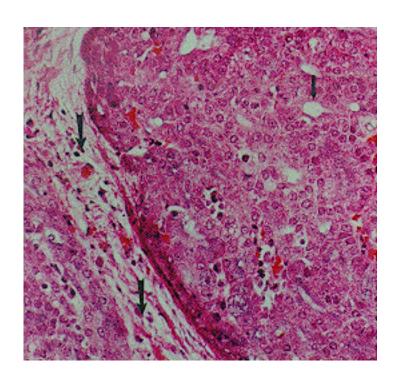
ACINIC CELL ADENOCARCINOMA

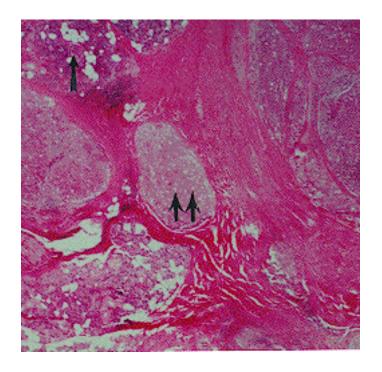
Acinic cell adenocarcinoma, a low grade malignant tumor, seen at any age but most prevalent in mid-adult life, arises most commonly in the parotid gland. Even in this site it is rare in comparison to other primary salivary gland neoplasms. The tumor is generally small, slow growing and usually painless. Some are cystic and generally they are encapsulated. Metastasis to regional lymph nodes may occur.

Microscopically, the most typical cell type (and the type for which the tumor is named) is one that rather closely resembles the normal parotid serous acinar cell with an abundant, very granular and basophilic cytoplasm and a dark, acinar nucleus. Cellular pleomorphism and mitoses are absent. A prominent lymphoid component with germinal centers may be present. Thin-walled vessels are prominent. Very small psammoma-like bodies may be seen in an occasional specimen. The stroma is often scant and may consist chiefly of delicate fibrovascular tissue, but occasionally dense hyalinzation is encountered. Overall, the tumor has a rather benign appearance but is malignant. Architectural patterns of growth include solid or sheet-like, papillary and glandular.

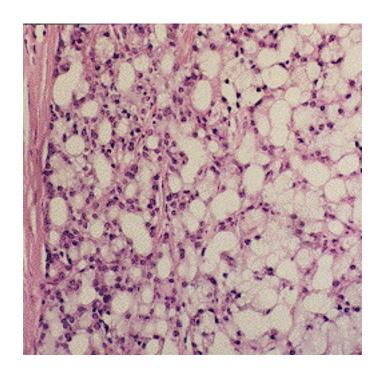
Acinic cell adenocarcinoma, parotid; anastomosing cords of cells with eosinophilic granular cytoplasm (more typically basophilic) arranged in sheet formation. Microcystic areas are seen (small arrow). Cytoplasm is usually basophilic and granular giving an appearance not unlike that of the normal parotid. The stroma, usually scant, consists of thin strands of fibrovascular tissue (large arrows).

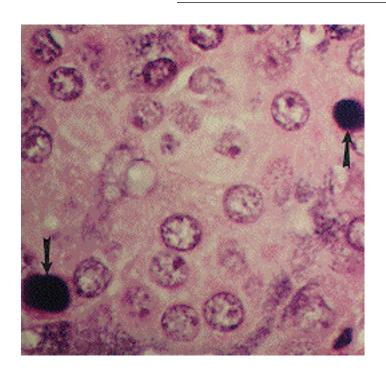


Acinic cell adenocarcinoma. Same tumor nodular pattern with tumor (double arrows) separated by heavy bands of collagen. Microcysts are present and there is a small area of normal parotid (single arrow) which the tumor resembles more closely than does any other malignant salivary gland neoplasm.

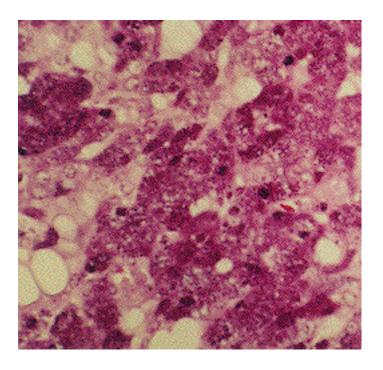


Acinic cell adenocarcinoma, clear cell variant. The cytoplasm appears highly vacuolated with a faint eosinophilic reticular appearance. Nuclei are small, dark and dense, basally located.





Acinic cell adenocarcinoma, high power; psammomalike bodies (arrows) are occasionally seen. There are vacuoles in most cells in this area. Note the granularity of the cytoplasm and the very indistinct cellular outlines.



Acinic cell carcinoma; typical granular composition that resembles normal parotid acinar cells.

CLINICAL ASPECTS:

The tumor is more common in women than men, slow-growing and ordinarily painless. Preoperatively, most are thought to be mixed tumors. Five year survival after surgical resection is about ninety percent but local recurrence is common and then the best recourse is total parotidectomy since the recurrent tumor is not encapsulated. Five to ten percent of patients eventually die of their disease, usually after a long course.