

Histopathology of Kuttner tumor

The histopathologic features of Kuttner tumor may evolve through four different histologic stages:

Stage 1 - focal sialadenitis

Stage 2 - diffuse lymphocytic sialadenitis with salivary gland fibrosis

Stage 3 - chronic sclerosing sialadenitis with salivary gland sclerosis

Stage 4 - chronic progressive sialadenitis with salivary gland cirrhosis

The early **first** histological stage shows **mild, focal chronic lymphocytic and plasmacytic inflammatory cell infiltration**, usually **periductal with periductal fibrosis and duct ectasia containing inspissated secretion**. The lobular architecture of the gland is usually preserved.

In evolving, **second** histological features have more severe periductal sclerosis and dense lymphocytes infiltration, ductular epithelial hyperplasia and focal metaplasia with occasional epimyoeplithelial islands and destruction of the lobular architecture. Periductal lymphoid follicles with reactive germinal centers are sometimes present within the gland. There is **fibrosis in the centers of the lobules and atrophy of acini**.

The progressive **third** histological stage reveals more prominent lymphocytic and plasmacytic infiltration with secondary lymphoid follicle formation. The features include extensive fibrosis with acinar atrophy, periductal hyalinization and ductal dilatation with reduction of the secretory gland parenchyma. The duct lining the epithelium adjacent to sialoliths commonly shows **squamous metaplasia, thickening and ulceration that are associated with marked periductal inflammation**. Dilated excretory portion sometimes demonstrates squamous metaplasia and an increased number of goblets-like mucous and ciliated cells. Focal granulomas are probably a reaction to extravasation of mucus and have been observed in some cases.

The final **fourth** histological stage discloses destruction of the lobular architecture and **sclerosis-cirrhosis** with parenchymal loss. Replacement by fatty and/or connective tissue with or without inflammatory reaction is noted.