

MAMMARY GLAND TUMOURS

- Tumours of the mammary gland are uncommon in farm animals. In cattle, fibroma and fibrosarcoma of the teat occur in yearlings. Inflammatory polyps that mimic neoplasia occur in the teat canal of cattle of any age.
- Mammary glandular tumours occur in cows 3 years of age or older and are most often adenocarcinoma or carcinoma. In contrast, adenomas are the most common mammary neoplasia in sheep and occur in adults.
- Mammary gland proliferative lesions in the goat include adenocarcinoma, cystic hyperplasia (fibrocystic change), and fibroepithelial hyperplasia. Nubian goats may be predisposed to fibroepithelial hyperplasia, which occurs in young goats, often less than 1 year of age.
- Mammary tumours are very rare in older sows, and reported cases have been carcinomas.
- Teat fibroma and fibrosarcoma are smooth firm nodules covered by intact skin that occur at the base of
- the teat.
- Intra-mammary tumours and hyperplastic lesions cause firm localized to diffuse areas of mammary gland
- that may or may not result in overall enlargement of the affected gland.
- Mastitis and fistulation can occur secondary to malignant tumours. Milk production in nonpregnant
- animals and mastitis can be seen in goats with fibroepithelial hyperplasia.
- Teat fibroma and fibrosarcoma are localized lesions consisting of proliferating fibroblasts with admixed collagen and variable mitotic activity.
- Adenomas are localized tumours formed by relatively well-differentiated and orderly epithelial cells forming glands.
- Adenocarcinoma and carcinoma are invasive tumours that can involve a large portion of the gland, and are composed of pleomorphic neoplastic epithelial cells that form glands or sheets of cells with a variable amount of collagenous stroma.

- Pleomorphic and atypical epithelial cells can be seen on cytologic preparations.
- Cystic hyperplasia in goats, also called fibrocystic change, consists of localized zones of dilated mammary ducts lined by epithelial cells lacking features of neoplasia. Fibroepithelial hyperplasia of goats consists of proliferation of ductal elements in a prominent loose to dense stroma and is similar to the mammary fibroepithelial hyperplasia seen in young female cats.
- Surgical excision of teat fibromas and fibrosarcomas is apparently curative. Surgical excision of hyperplastic lesions and adenomas, which may necessitate removal of the entire affected gland, is also curative. Careful evaluation of cows with mammary neoplasia before surgery is warranted because metastasis of adenocarcinoma and carcinoma to local lymph nodes, internal organs, and to the peritoneum is common. Metastasis of mammary carcinoma in the goat has also been reported.



Tumor of the udder

EQUIPMENT USED IN TUMOR REMOVAL



Cornell Teat Curette



Hugs Tumour extractors