\*\*Mastectomy can be done under standing sedation with local blocks or general anaesthesia in lateral recumbency.

How is the procedure done?

1. Place the animal in lateral recumbency and the leg tied to the table in an abducted position.
2. The area of the udder surgically prepared from the umbilicus to the perineal area.
3. An elliptical incision is made around the udder (the skin is conserved so that it can be closed without tension also, it should be placed distally on the udder towards the teat so enough remain for closure.
4. Skin incision is made 4 to 6 inch cranial to the udder to the perineal skin
5. After the skin incision, blunt and sharp dissection are applied to separate the skin from the mammary tissue.
6. Retract the skin proximally, continue dissection to identify the external pudendal vasculature to avoid inadvertent transection.
7. Then continue Dissection until the external pudendal arteries and veins are encountered
8. Passing through the inguinal rings bluntly (and gently) separated from the surrounding tissue and ligate them. (Double or triple ligations are performed use routinely uses #2 or #3 chromic gut with two proximal circumferential sutures and a transfixation suture distal. A clamp or another ligature is placed on the other side of these vessels and the vessel is transected. The pudendal artery and vein should be ligated separately.
9. Dissection is continued cranially as the subcutaneous abdominal vein is ligated in a similar manner and the perineal vessels are also ligated as they are encountered at the caudal aspect of the mammary gland.
10. Near the medial aspect of the mammary gland, the median suspensory ligament should be sharply transected. The suspensory ligament is transected at approximately 1 cm from the body wall. (Transection of the ligament too close to the body wall may inadvertently incise through the body wall or create weakness in the ventral body wall support. )

 NOTE: Hemi if mastectomy is desired, complete transection through this ligament is not performed to support the remaining mammary tissues has medial support.

NOTE: Complete mastectomy involves creation dead space thus a Penrose drain must be placed 3 days following surgery to decrease fluid accumulation. That exits at the ventral (dependent) aspect of the dead space pocket. Preferable dead space should be removed, with sutures prior to skin closure and the skin incision is closed. (Using tension releasing suture if the skin is under tension when closing)

NOTE: Physiologic Mastectomy is an approach to that doesn’t involve surgical removal of the udder but rather it’s a technique involves making a laparotomy incision in the paralumbar fossa ipsilateral to the side that has udder pathology. If the ipsilateral side cannot be used, this procedure can be performed successfully from the contralateral side. Physiologic mastectomy has been described with external pudendal vasculature ligation alone or in combination with subcutaneous abdominal and perineal vasculature ligation

-Basically, the external pudendal artery and vein are palpated as they course through the inguinal rings (approximately 10 cm ventral and lateral to the pubic symphysis).

- Blunt dissection is used to separate the vessel from the surrounding tissue so that ligation can be performed with large non-absorbable suture or sterilized cable ties. ( The presence of an arterial pulse distal to the ligation is indication for a second ligation)

-Atrophy of the gland is expected from 10 days to 8 weeks post operatively.