**Intraoperative repair of teat fistulas**:

1. Perform a local ring block at the base of the teat using 2% Lidocaine. A tourniquet can be placed around the teat base to prevent hemorrhage.
2. Place a cannula into the teat sinus and make an elliptical incision around the fistula to remove all scar tissue.
3. Suture the mucosa using simple continuous or simple interrupted suture patterns.
4. Suture the skin using vertical mattress sutures, tying loosely to prevent wound edge necrosis post operatively.

**Intraoperative repair of teat obstructions**:

1. Perforate the membrane with a milk cannula. The Huggs tumor device or a curette can also be used.
2. Using a teat knife slit radially in three of four directions
3. The cow should not be milked completely for about 10 days
4. For apical obstructions, milk stenosis may be temporarily relieved by making longitudinal incisions in the fibrosed canal with a teat knife or by widening the canal with a teat slitter
5. Place a self-retaining cannula to prevent post-operative milk stenosis

**Intraoperative amputation of the mammary gland**

1. Epidural analgesia is administered and the cow is placed on dorsal or dorsolateral recumbency
2. An elliptical skin incision is made around the discolored area and using a scalpel, dissection of the glandular tissue is performed along the suspensory ligament medially and the lateral ligament.
3. Using a tenaculum forceps, dissect the udder from the body wall, beginning caudally



1. Double ligate the external pudendal artery and vein, ventral perineal artery and vein and subcutaneous abdominal vein and transect the vessels between the ligatures
2. Continue dissection of the udder cranially
3. The subcutis is sutured in a simple continuous pattern using absorbable suture material
4. Sterile gauze or latex drains are placed deeply and superficially in the wound
5. The skin is then closed with simple interrupted sutures or in a Ford interlocking pattern.