

What is it?

Surgery of the teat & udder

- There are various disease conditions of the udder. The major cause of this is due to poor management systems. However, other causes exist even if there are good management practices, such as trauma, improper flooring, milk machines, kicked by other animals and crushing. Injuries to the teat can be defined as internal or external injuries. Correction of these conditions may involve surgical intervention in order to correct the issue. The most appropriate surgical procedures will be mentioned later on as well as in the intraoperative procedure section.

Case 1: Gangrenous mastitis - mastectomy (teat amputation - traditional & alternative)

- Gangrenous mastitis in cows is a peracute or acute form of mastitis with frequently fatal consequences. The main infectious agents that cause gangrenous mastitis are *Staphylococcus aureus*, *Escherichia coli* and *Clostridium perfringens*. Affected cows always lose the quarter of the mammary gland that is affected.
- It is characterised by classical signs of inflammation with bluish discoloration which then progresses to necrosis of the udder.
- Teat amputation and physiological udder amputation (tying off blood vessels supplying the udder) have also been used to treat gangrenous mastitis. A partial mastectomy of one quarter using a cranial epidural analgesia with 2% lignocaine is administered to manage a gangrenous mastitis affecting only one quarter caused by *Proteus mirabilis* and not amenable to medical treatment.
- A safe and effective treatment includes partial mastectomy of the affected quarter. Amputation of complete mammary gland can also be done considering the general health status of the animal

Case 2: Teat laceration - closure of teat laceration

- Teat laceration is a common clinical condition in dairy cattle where there are improper grazing systems resulting in major economic loss. This can occur due to a magnitude of reasons such as; environmental conditions, milking machine, trauma, or chemical injury.
- Treatment involves closure of the teat laceration.
- An alternative would be to allow the laceration to heal by second intention or amputate the affected teat.