

## Postoperative complications

### ➤ Haemorrhage

- Can be due to there being a pulsing stream in the testicular artery (can be fatal)
- Surgical castration increases the risk of haemorrhage
- This is corrected by applying ligatures, clamps or packing

### ➤ Swelling

- Due to insufficient wound dressing, inadequate post op exercise, increased levels of surgical trauma and/or poor lymphatic drainage
- Severe swelling is treated by administering antibiotics, anti-inflammatory drugs and attempting to drain the area.

### ➤ Hydrocoele

- Vaginal tunic swells with fluid (fluid swelling is painless)

### ➤ Scirrhous cord formation

- Due to poor technique
- Use of non-absorbable suture material (foreign body)
- Inadequate drainage and exercise

### ➤ Inguinal hernia

- Can be mistaken for a testicle and result in incision of the intestines which can be fatal

### ➤ Penile damage

- Mistaking the penis for the testicle results in incision of the penis, which leads to amputation or a urethral fistula
- If the penis end up inside the emasculatome, there will be penile necrosis and urethral obstruction

### ➤ Evisceration

- Can occur after an open castration, but it is rare
- More common in older bulls, or those with a large inguinal ring
- Fatal but once it is detected rapidly and corrected, the prognosis is good

### ➤ Clostridial infection

- Pathogens affect scrotal tissue and testes following banding castration resulting in ischemia and necrosis
- Surgical castration wound is also prone to infection by pathogens

- Clostridial organisms can enter via these sites and result in local or systemic infections (Recommended to give calf a clostridial vaccination prior to castration)

➤ Disease

- Immunosuppression associated with castration can predispose the cattle to local or systemic diseases
- Surgical castration has been associated with an increased haptoglobin and decreased gamma-interferon production
- Burdizzo castration causes a reduction in T lymphocyte function and WBC circulating in the blood with an increase in neutrophils
- Combination of Flunixin meglumine with Lidocaine for ring castration of 6 month old bulls does not increase the haptoglobin concentrations
- An infected wound requires the use of antibiotics to prevent a toxaemia

## **References**

- 1) Welfare Implications of Castration of Cattle [Internet]. American Veterinary Medical Association. [cited 2020Oct11]. Available from: <https://www.avma.org/resources-tools/literature-reviews/welfare-implications-castration-cattle>
- 2) JM; E. Surgery of the scrotum [Internet]. The Veterinary clinics of North America. Food animal practice. U.S. National Library of Medicine; [cited 2020Oct11]. Available from: <https://pubmed.ncbi.nlm.nih.gov/18471567/>