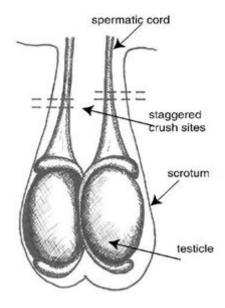
# **Non-Surgical Castration**

- ➤ Emasculatome (Burdizzo)
- ➤ Elastrator band (Elastrator, EZE bander, Callicrate bander)
- > Short scrotum method (For cryptorchidism)

# **Emasculatome (Burdizzo):**

- 1. This technique is to be used with the spermatic cord and can be palpated at one month or older.
- 2. Proper sized forceps should be used based on the size of the animal. This is so that the arteries will be properly crushed.
- 3. Locate the spermatic cord. Reach between the hind legs and grasp the scrotum. Pinch the spermatic cord to the outside edge of the scrotum between your thumb and forefinger.
- 4. Position the burdizzo for efficient crushing. Place the jaw of the burdizzo with the projections on the front side of the scrotum (clipping one scrotum at a time).
- 5. Only the scrotum that contains the spermatic cord and the blood vessels leading to the scrotum should be crushed. Avoid crushing more that is not necessary and cutting the skin laterally
- 6. The burdizzo should be left in place for 15-20 seconds and it should be possible to feel the cord snap.
- 7. Release the burdizzo. Place it to a new area 1cm below the first area that was clamped. The burdizzo is placed below the initial area rather than above to reduce pain.
- 8. Repeat procedure on other side ensuring the cords are clipped at different levels. The pinches are staggered so that the scrotal sac can still receive enough blood and not become gangrenous.
- 9. The medial rafe and the major scrotal blood vessels run in the middle so be sure to avoid crushing these because if they are damaged, there would be necrosis and the scrotum would fall out resulting in the formation of a wound.
- 10. Recheck calf 4-6 weeks to ensure that both testicles have shriveled. Thrombus developed within the spermatic vessels due to no blood supply, leading to atrophy of the testicles so that they become non-functional.

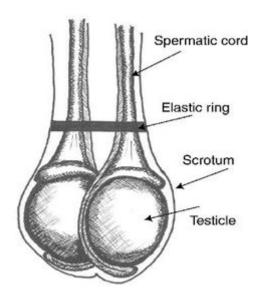


#### **Complications:**

- Risk of tetanus tetanus vaccine should be administered 10-14 days prior to procedure. Two vaccines should be given 6-8 weeks apart to ensure the calf is protected from tetanus.
- Need to ensure that the vascular supply cord on either side is crushed because if they are not, the animal can still be fertile
- Causes acute pain

### **Elastrator band:**

- 1. Elastrator technique for calves from birth to 3 weeks of age.
- 2. Pull both testicles into the scrotum.
- 3. Place the rubber band on the elastrator. With elastrator prongs facing up, stretch the ring open and slip the band over the scrotum. Release the band just above the testicle.
- 4. Ensure that both testicles are still in the tip of the scrotum & the ring is properly placed.
- 5. Remove the elastrator from under the band.
- 6. The scrotum will fall off after a few weeks
- 7. The elastrator is used for young animals (before 10 days old), while the Callicrate bander is used for adult animals.



# **Complications:**

- Risk of tetanus vaccinate prior
- Risk of blackleg vaccinate prior
- Causes acute pain
- The scrotum may not always fall off completely and this needs to be cut off at day 4

### **Short scrotum method:**

- 1. Place the rubber ring around the scrotum, ensuring the testicle is above it (pushing the testicles up against the body wall)
- 2. After a few weeks, the scrotum will drop off

### **Complications:**

• The testicles are pushed up against the body wall so that the body temperature makes the animal infertile, this is not a guarantee because if the testicles are not high enough, the animal would still be fertile.

# References

- 1) Yumpu.com. Castrating Beef Calves Walker [Internet]. yumpu.com. [cited 2020Oct12]. Available from: https://www.yumpu.com/on/document/road/40663012/costrating.boof.colves.yval
  - https://www.yumpu.com/en/document/read/49663912/castrating-beef-calves-walker
- 2) Ewoldt JM. Surgery of the Scrotum [Internet]. Veterinary Clinics of North America: Food Animal Practice. Elsevier; 2008 [cited 2020Oct12]. Available from: <a href="https://www.sciencedirect.com/science/article/abs/pii/S0749072008000030?via=ihub">https://www.sciencedirect.com/science/article/abs/pii/S0749072008000030?via=ihub</a>
- 3) NADIS Animal Health Skills Castration of Calves [Internet]. NADIS. [cited 2020Oct12]. Available from: https://www.nadis.org.uk/disease-a-z/cattle/castration-of-calves/
- 4) Ministry of Agriculture, Food and Rural Affairs [Internet]. Castration of Calves. [cited 2020Oct12]. Available from: <a href="http://www.omafra.gov.on.ca/english/livestock/beef/facts/07-029.htm">http://www.omafra.gov.on.ca/english/livestock/beef/facts/07-029.htm</a>