**PROCEDURES**

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| CLOSED METHOD | OPEN METHOD |
| 1. Proper pre-operative techniques were done (see pre-op techniques).
2. Proper restraint and pain management were carried out
3. The animal was placed in lateral recumbency
4. The animal was properly restrained by an assistant and Chemical/ Mechanical restraint were done (see pre-op procedures). (A TOM FOOL’S KNOT WAS PLACED ON THE HIND LEGS AND PULL FORWARD TO MEET THE FORE LIMBS)
5. Proper antiseptic techniques were done, which includes; cleaning and sanitizing the surgical area (scrotum) with chlorhexidine and gauze followed using iodine with gauze.
6. The surgical equipment’s was submerged and disinfected in diluted iodine.
7. A bedding was provided for our surgical field that was soaked in diluted iodine.
8. Gloves were applied to both hands
9. The testes were pushed down into the scrotum.
10. The left spermatic cord was pushed lateral of the scrotum and the right spermatic cord was pushed lateral of the scrotum.
11. The burdizzo was placed over the first spermatic cord about 1.5 to 2cm over the testes ensuring that the C-shaped side of the jaw is facing upwards to keep the spermatic cord from slipping out.
12. The burdizzo was placed over the first spermatic cord and ensured it’s between the jaws of the burdizzo and was hold for 1 minute ensuring that the midline/septum (blood supply) of scrotum is not crushed.
13. The procedure was performed a second time on the same spermatic cord 1cm below the first crush line to ensure that the spermatic cord was properly crushed.
14. The process was then repeated for the second spermatic cord.
15. The burdizzo was removed and scrotum inspected for any break in the skin.
16. Respiration and heart rate were monitored during the surgery.

**Proper sanitation and post-operative techniques are required after surgery (see post OP techniques).****https://www.youtube.com/watch?v=NG0vKqkc3XI** | 1. Proper pre-operative techniques were done (see pre-op techniques).
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3. The animal was placed in lateral recumbency
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7. A bedding was provided for our surgical field that was soaked in diluted iodine.
8. Gloves were applied to both hands
9. The scrotal sac was pulled down ensuring that the testes remain in the upper two third (1/3) of the sac.
10. The assistant holds the testes in the upper two third (2/3) of the scrotum while the lower one third (1/3) of the scrotal sac was surgically removed in a horizontal fashion using a #10 scalpel blade.
11. The testes should fall through the incision after making the incision site surrounded by the vaginal tunic.
12. One hand is used to slowly pull the testes downward while the other hand is pushing the scrotum upwards. This procedure was continued until the muscle in the spermatic cord separates.
13. Each testis was grasped in one hand and subcutaneous tissue is pushed upwards and separated from the common vaginal tunic.
14. The vaginal tunic was then incised over the cranial pole of each testis.
15. The tunic was then gripped and tension was applied to separate the tunic from the testis.
16. The spermatic cord was then separated from the ductus deferens, the tunic and the external cremaster muscle.
17. The spermatic cords were, tightly double ligated above each testis.
18. The jaws of the emasculator are opened and position distal to the ligations 2cm over the testes, with the Knot facing downwards (Knot to Knot).
19. The handle of the emasculator was then squeeze together to close the jaws.
20. The emasculator clamped was kept onto the spermatic cords for at least one minute ensuring optimal crushing and constriction of the blood vessels.
21. If a crush only emasculator was used a scalpel blade can be used to remove the portion of the spermatic cord distal to the crush.
22. Another method of removing the testes was pulling them downward and using the scalpel blade to scrape the cord in a shaving motion until the cord will be severed (DO NOT CUT).
23. Respiration and heart rate were monitored during the surgery.

**Proper sanitation and post-operative techniques are required after surgery (see post OP techniques).**<https://www.youtube.com/watch?v=w-Ak8tJFnQ4> <https://www.youtube.com/watch?v=UtLsSXOKPow> |