

CASTRATION AND VASECTOMY

Castration:

Indications: To render the animal docile, malignant diseases or irreparable injury to the scrotum or tactical, enlarged prostate, to improve the quality of flash, operation for scrotal hernia.

Surgical Anatomy: The wall of scrotum consists of skin, Dartos (layer of connective tissue and smooth muscle) which is closely adhered to the skin, scrotal fascia, tunica vaginalis and external cremaster muscle. The testis lies in the scrotum which is covered by tunica albuginea followed by tunica vaginalis visceralis. The epididymis is attached to the dorsal border of the testis. The spermatic cord contain internal spermatic artery and vein, lymphatic, epididymis, internal spermatic plexus, ductus deference internal cremaster muscle and tunica vaginalis visceralis.

Control and Anesthesia: Animal is secured in lateral recumbency with the upper hind leg pulled forward towards the shoulder region or in standing position. Sedation with Xylazine @ 0.1 mg /kg b wt followed by anterior epidural anesthesia

Site: The scrotum can be incised on its lateral or posterior aspect of each testicle in case of bulls and posterior downward in case of horse.

Surgical Procedure: A longitudinal skin incision is made on the posterior aspects of scrotum just lateral to median raphe. The underlying muscles, tunica vaginalis and tunica albuginea are separated. Once the tunica albuginea incised testical is taken out and spermatic cord is isolated by separating from vascular portion to nonvascular portion. One artery forceps is applied on the spermatic cord and double transfixation sutures are placed one inch away from each other above the artery forceps. After placing the transfixation suture the testical is separated by cutting the spermatic cord just below the artery forceps similarly non vascular part is also ligated and severed. After the checking the stump for any bleeding artery forceps is removed and left out portion is returned in to normal position the skin incision is sutured by placing series of interrupted suture. In the similar fashion the other side testical is also removed. In case of equine the skin incision is left unsutured because of lot of exudation after operation.

Vasectomy:

Indication: To identify the cow in estrus (Teaser bull) and to prevent the ejaculation.

Surgical procedure: The pendulous scrotum along with the testical is pulled away from the base and spermatic cord is palpated. A skin incision of 2 to 2.5 inch is made on the lateral or posterior aspect of base of the scrotum after incising the skin subcutaneous tissue and tunica vaginalis is incised. By using a curved artery forceps the spermatic cord is lifted and brought to the level of skin incision the tunica vaginalis is incised to visualize vas deference. The vas deference is palpated as a hard glistening white tube. It is isolated form its blood vessels and grasped with the help of artery forceps and legated on either side of forceps about 3 cm away from each other by using no. 1 catgut. The piece of vas deference is removed. The curved artery forceps is removed and the spermatic cord is replaced back in its normal position. Skin incision is sutured by applying 2 to 3 interrupted suture same procedure is carried out on other side spermatic cord

Post Operative Care:

1. Daily or alternate dressing with antibiotic ointment.
2. Parental antibiotics 5 to 7 days, analgesic for 2 to 3 days.
3. Restricted movement of animal.
4. Removal of skin suture on 8th to 10th postoperative day.