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Transcription of Canine Closed Castration, 2011

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BEGIN TRANSCRIPTION

[Barking]

Narrator: The canine closed castration.

Narrator: The patient is clipped and an appropriate surgical prep is performed, note that the clip extends cranially to the rib margin and caudally underneath the scrotum. Only the long hairs on the scrotum are clipped.

Narrator: Surgical towels are then placed. Note that the prepuce is toweled out and a towel angles back towards the scrotum. The caudal towel is placed at the base of the scrotum. Normally the scrotum is toweled out, the exception to this would be very small puppies in which we would towel the scrotum in. Towel clamps are then placed. Note that the caudal towel clamps are well lateral of the scrotum and the cranial towel clamp is well lateral of the penis.

Narrator: A surgical drape is then placed. The testicle is pushed forward, midline is located, and an incision is made through the skin on midline with a blade. The subcutaneous tissues are incised. It is important to keep the testicle from moving back into the scrotum as this will increase trauma to the subcutaneous tissues. The testicle is pushed out through the incision and the scrotal ligament is broken down. Grasp the scrotal ligament at its base at the scrotum and take the testicle cranially. Tear the fascia down towards the tunic. It is important to clean the area where the ligatures are going to be as much as possible; some dogs will have considerable fat in this area. The three major structures are visible here: the pampiniform, the cremaster muscle, and the vas deferens in between. A clamp is placed across the spermatic cord and a transfixing ligature is applied. The needle is directed between the cremaster muscle and the vas deferens. The free ends of suture are taken around the pampiniform plexus and two throws are tied.

Narrator: The free ends of suture are then passed around the cord and six to eight throws are tied. An encircling ligature is then applied proximal to the transfixing ligature. Note the ligatures are as close as possible to each other without being on top. The stump is grasped with the

mosquito hemostat between the ligatures and the clamp and the cord is transected. Once transected the mosquito hemostat is moved to the vas deferens as it is avascular and we can therefore assess hemorrhage.

Narrator: Once satisfied, the stump should be released into the subcutis. The second testicle is pushed forward, the subcutaneous tissues are incised, and the testicle is pushed out through the incision. The scrotal ligament is broken. Occasionally in dogs you will need to cut the scrotal ligament, when cutting stay close to the testicle to avoid cutting into the scrotum which is inverted. Be sure to clean the area where the ligatures are going to be applied, place a clamp, place the transfixing ligature, once again directing the needle between the cremaster and the vas deferens. Secure the ligature around the pampiniform plexus with two throws and encircle the cord and perform six to eight throws. Apply an encircling ligature proximal to the transfixing, apply six to eight throws.

Narrator: Attach a hemostat to the cord and transect the cord beneath the clamp. Move the mosquito hemostat to the vas deferens, assess the stump for hemorrhage and release. The subcutaneous layers and the intradermal layer are closed. Start the subcutaneous layer cranially, four or five throws is sufficient. Be sure to leave the suture tag cranially to tie off the intradermal line. Progress caudally in a simple continuous pattern. Note that cranial tension on the suture line will allow you to suture without the use of thumb forceps. Ideally a bite of subcutis is taken on each side, as well as in the middle, as you pass from side to side. Once the subcutaneous line is complete, start the intradermal line by directing the needle caudally to exit at the point of incision. The needle should exit in the dermis.

Narrator: Once the subcutaneous tissues are closed, an incisional line block is performed. The block solution floods the area of incision and is allowed to seep in on its own. Use a horizontal mattress pattern to close the intradermal layer. Be sure to get the junction of skin and subcutaneous tissues at each entry and exit of the needle. Taking small bites as you move cranially will allow better apposition of the skin. When you reach the cranial end of the incision tie to the suture tag that was left previously, four or five throws is sufficient.

Narrator: Cut the short end of suture, apply caudal traction on the suture, and direct the needle between the knot and the cranial end of the incision. The needle should exit the skin cranial to the incision. Pull the suture while stabilizing the skin and cause the knot to move into the subcutaneous tissues.

[Cheering]

END TRANSCRIPTION