Udder Amputation

Physiologic Mastectomy via Flank Laparotomy

Position: Standing position

Surgical approach: Conventional para-lumbar fossa laparotomy on the side ipsilateral to the mastitic or affected gland but can also be done on the contralateral side if adhesions from previous surgeries are present

Procedure

1. Approximately 20-cm incision is made in the mid-paralumbar fossa beginning approximately 8 cm ventral to the lumbar transverse processes.
2. Sharp dissection through all muscle layers or a grid approach can be used, depending on the surgeon's preference. A brief exploration of abdominal structures is suggested to rule out other conditions that may affect prognosis.
3. The external pudendal artery is a branch of the pudenda-epigastric trunk, which in turn is a branch of the internal iliac artery.
4. The external pudendal artery and vein are located by palpating along the internal abdominal wall caudal to the incision as they enter the internal inguinal ring (approximately 10 cm ventral and lateral to the pubic symphysis).
5. The pulse and size of the artery (1–2 cm diameter) are easily recognized as the vessel penetrates the internal inguinal ring exiting the abdominal cavity

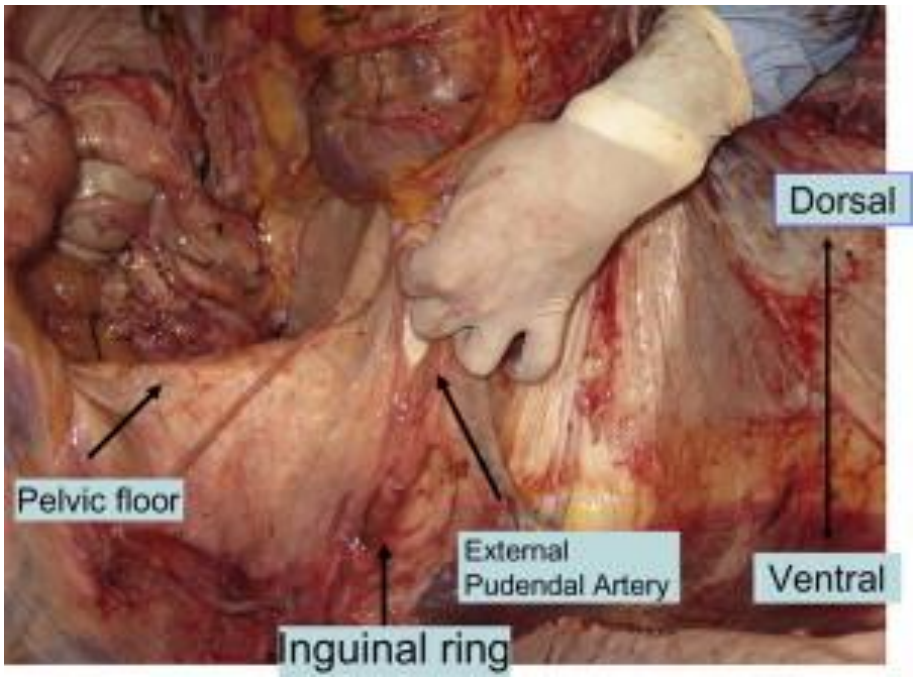

Fig. 1 External pudendal artery is located as it passes through inguinal ring

6. The external pudendal artery and vein are isolated immediately proximal to the internal inguinal ring via blunt dissection to separate the vessels from the peritoneal membrane, fat, and connective tissue

Fig 2. Vessels from the body wall are bluntly dissected carefully with the tips of fingers and thumb

7. It is important to free the vessels from most of the surrounding connective tissue to allow for proper ligation. Adequate dissection is achieved when the operator can insert two fingers completely around the vessels

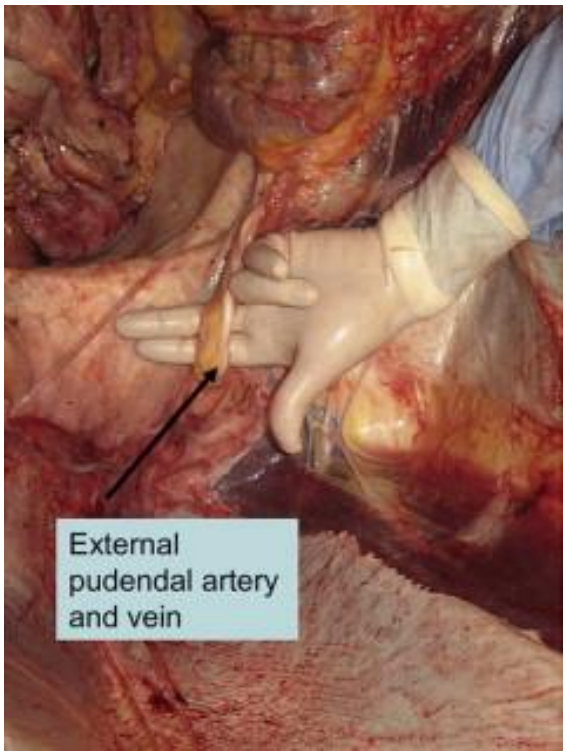

Fig 3 Vessels are dissected until two fingers can fit between the vessels and the body wall

8. Ligation can be achieved using any large, non-absorbable suture material. We have found that the use of a sterilized cable tie in place of suture material greatly aids in the speed and ease of ligation

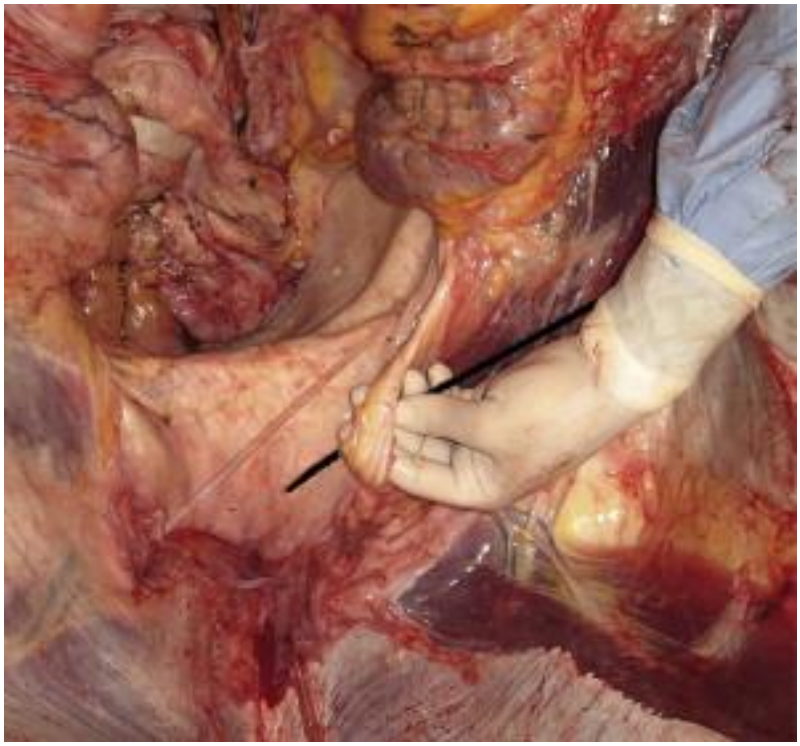

Fig 4. Insert cable tie under the vessels

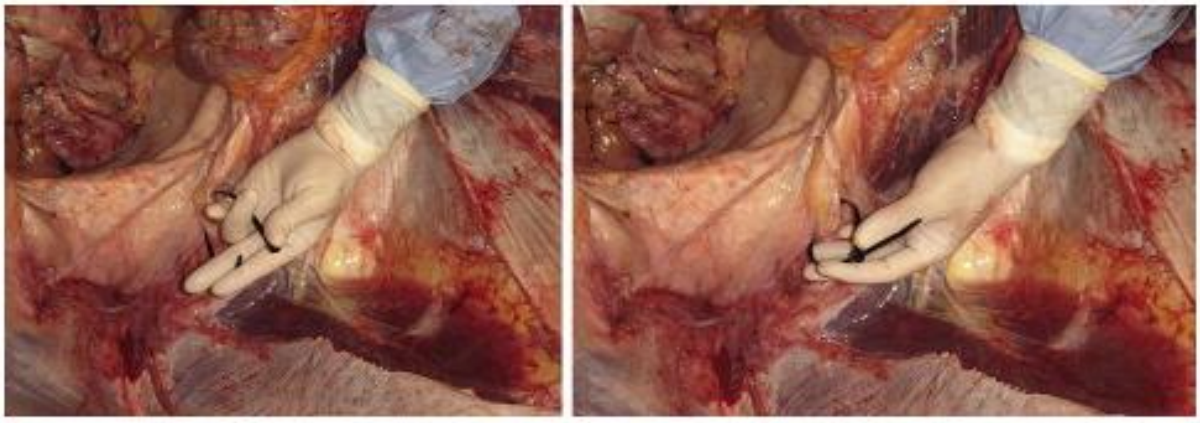

Fig 5. Insert cable tie into ratchet case and tighten

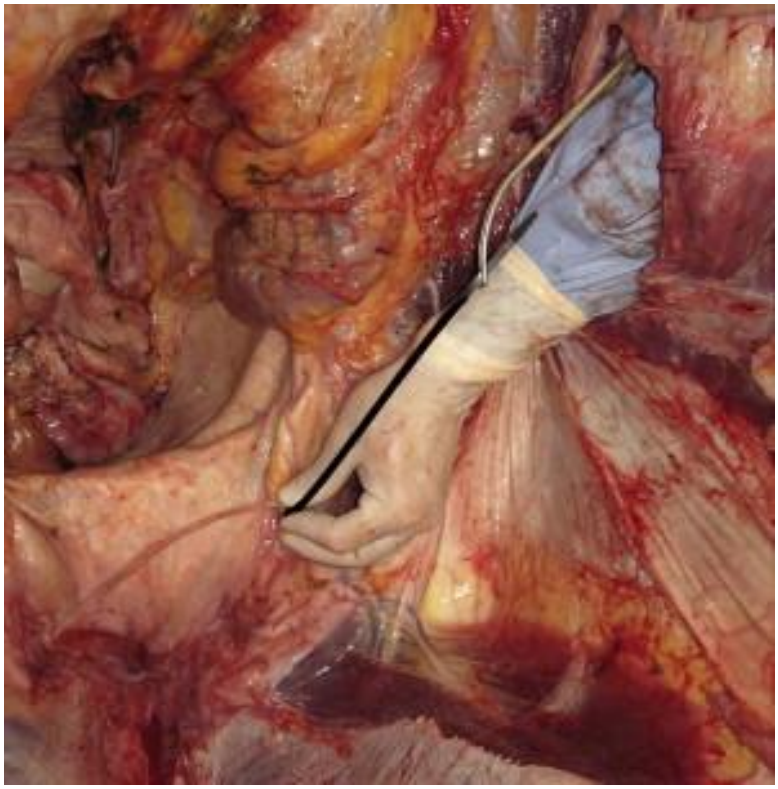

Fig. 6 Long-handled carmalt forceps can assist in tightening the cable tie

9. Once the cable tie is placed, the artery distal is palpated to detect any remnant pulse.
10. If a pulse is present, the tie is further tightened.
11. Once ligation is deemed successful, the tie can be trimmed short or left untrimmed, and the abdomen is closed in a routine manner