PROCEEDING

International Seminar and 2\textsuperscript{nd} Congress of SEAVSA

INCREASING ANIMAL PRODUCTION THROUGH ZOONOSES AND REPRODUCTIVE DISORDER HANDLING, AND THE IMPLEMENTATION OF BIOTECHNOLOGY

Surabaya, 21-22 June 2011
Royal Ballroom, JW Mariott Hotel
Surabaya - Indonesia

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Faculty of Veterinary Medicine Universitas Airlangga
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ACKNOWLEDGEMENT
RADICAL MASTECTOMY OF GYNECOMASTIA CASE IN SAANEN GOAT

Gunarti, R Harry Soehartono, Deni Noviana, Budhi Jasa Widyananta, Dudung Abdullah, Rr Soesatyoratih, Riki Siswandi, and M Fakrul Ulum

Division of Surgery and Radiology, Faculty of Veterinary Medicine
Bogor Agricultural University

In this study, we reported a successful surgery of gynaecomastia case in a high reproductive performance Saanen buck-goat. The goat was presented with significant enlargement of the mammary glands, which was clinically diagnosed as gynaecomastia. The mammary glands had been impairing the goat’s sexual performance and locomotion. After clinical and laboratorial evaluation, the animal was submitted to radical mastectomy. The surgery performed under inhalational anesthesia. An elliptic skin incision was performed around each mammary gland. Subcuticular blunt dissection was accomplished to isolate the mammary tissue from the abdominal muscular layer. Subcuticular layer and skin closure was carried in a routine fashion. Hygienization of the surgical wound was performed with 3% povidone iodine solution for seven days. Post-operative treatments were carried using combination of procaine penicillin-G and streptomycin, and dexamethasone. The excised mass was sampled for anatomic/histological assessment. Macroscopically, the left mammary gland presented 37.6 cm in length, 36 cm wide and gross weight 0.6 kg. The right gland presented 48 cm in length, 43.5 cm wide and gross weight 1.6 kg. The microscopic assessment revealed hyperplasia of the glandular ducts. No abnormalities resembling malignant mammary neoplasms or degeneration were observed. The surgical procedure was successfully accomplished without any perioperative complication. The animal recuperated satisfyingly and surgical wound healed completely within the first 7 days post-operation. The goat was not culled and returned to normal reproductive activity. Within 3 months of follow-up, the animal was able to perform normal reproductive activity and successfully conceived 3 does.

Keywords: Gynaecomastia, mammary gland, goat anesthesia, Saanen goat, mastectomy

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Radical Mastectomy of Gynecomastia Case in Saanen Goat

Gunanti*, RH Soehartono, D Noviana, BJ Widyananta, D Abdullah, Rr Soesatyo Ratih, R Siswandi, MF Ulum
* corresponding author: bealah.fkhpi@yahoo.com; Division of Surgery and Radiology, Faculty of Veterinary Medicine, Bogor Agricultural University, Jl. Agatis, Kampus IPB Darmaga, Bogor 16680

Abstract
In this study, we reported a successful surgery of gynecomastia case in a high reproductive performance Saanen buck goat. The goat was presented with significant enlargement of the mammary glands, which was clinically diagnosed as gynecomastia. The mammary glands had been impairing the goat’s sexual performance and locomotion. After clinical and laboratoral evaluation, the animal was submitted to radical mastectomy. The surgery performed under inhalational anesthesia. An elliptic skin incision was performed around each mammary gland. Subcuticular blunt dissection was accomplished to isolate the mammary tissue from the abdominal muscular layer. Subcuticular layer and skin closure was carried in a routine fashion. Hygieneization of the surgical wound was performed with 3 % povidone iodine solution for seven days. Post-operative treatments were carried using combination of procaine penicillin-G and streptomycin, and dexamethasone. The excised mass was sampled for anatomic/histological assessment. Macroscopically, the left mammary gland presented 37.6 cm in length, 36 cm wide and gross weight 0.6 kg. The right gland presented 48 cm in length, 43.5 cm wide and gross weight 1.6 kg. The microscopic assessment revealed hyperplasia of the glandular ducts. No abnormalities resembling malignant mammary neoplasms or degeneration were observed. The surgical procedure was successfully accomplished without any perioperative complication. The animal recuperated satisfyingly and the surgical wound healed completely within the first 7 days post-operation. The goat was not culled and returned to normal reproductive activity. Within 3 months of follow-up, the animal was able to perform normal reproductive activity and successfully conceived 3 kids.

Keywords: Gynaecomastia, mammary gland, goat anesthesia, Saanen goat, mastectomy.

Presurgery Animal Condition

Figure 1. (A) A three-year-old male Saanen goat was observed by local farmer having a spontaneously developing udder. The animal owned optimal phenotypic characteristics for the Saanen breed; (B) Due to the significant augmentation of the mammary glands, the goat locomotion and sexual performance had been impaired.

Figure 2. The goat also submitted to x ray (C) and ultrasound examination (D), which concluded to be a solid soft tissue instead of abscess. Thoracic and abdominal radiography were also performed which revealed no evidence of metastatic disease.

Mastectomy Procedure

Figure 3. E. The mammary glands were isolated from abdominal muscle using ducken clamp; F. Incision of skin was made on the 1/3 base of the mammary from abdominal layer.

Figure 4. G. Electro-cautery was utilized to prevent excessive bleeding; H. Clamping of blood vessel and suturing were performed cautiously due to numerous active vascularization. “Once we successfully remove the developed udder, the buck male goat is ready to show their reproductive performance. Additionally, culling high performance goats owning gynecomastia is not recommended, as long as sexual function is not impaired”

Figure 5. I. Subcuticular layer and skin closure was carried with simple sutures; J. The dissected mammary gland. The left mammary gland presented 37.6 cm in length, 36 cm wide and gross weight 0.6 kg. The right gland presented 48 cm in length, 43.5 cm wide and gross weight 1.6 kg.

References