

SURGICAL MANAGEMENT OF PERINEAL FIBROMA IN A CROSSBRED JERSEY COW – A CASE REPORT

R.Pooja¹, A. Kumaresan^{2*}, P. Sankar³, M. Vijayakumar⁴,
K. Gopal⁵, S. Dharmaceelan⁶ and S. Kathirvel⁷

*Department of Veterinary Surgery and Radiology
Veterinary College and Research Institute,
Tamil Nadu Veterinary and Animal Sciences University,
Namakkal -637002*

ABSTRACT

Perineal fibroma is a benign connective tissue tumor rarely reported in cattle. A 3 year old cross - bred cow was presented with a pedunculated vulvar mass showing progressive enlargement, ulceration and scanty bleeding. Enbloc resection was done under caudal epidural anesthesia and local infiltration using 2% lignocaine. Histopathological examination confirmed fibroma characterized by spindle-shaped fibroblasts and abundant collagen fibers. The animal recovered uneventfully following surgery. Complete surgical excision resulted in favorable prognosis.

Keywords: Perineal fibroma, surgical excision, histopathology, cattle Surveillance.

Received : 16.06.2026

Revised : 11.08.2026

Accepted : 14.08.2026

INTRODUCTION

Fibromas are benign type of neoplasm of fibrocytes that arises from dermis or subcutaneous region (Weiss and Goldblum, 2001). These tumors are common in the horse and dog (Vegad, 2018). Regarding location, fibromas can occur based on the

distribution of connective tissue. The most common sites are subcutaneous tissue of the head, neck, shoulder and legs (Vegad, 2018). In cattle, fibromas involving the vulvar and perineal regions are uncommon but may interfere with normal physiological functions depending on their size and location. These tumors are generally slow in growth, firm, non-painful and well circumscribed. Continuous irritation and trauma may result in ulceration and bleeding from the surface of the mass. Histopathological examination remains the golden standard for confirmatory diagnosis. Surgical excision is considered the treatment of choice owing to benign and localized nature of the tumor. The present report describes the clinical findings,

¹MVSc.Scholar

²Professor

*Corresponding Author Email :kumaresandr1973@gmail.com

³Associate Professor

⁴Assistant Professor,

⁵Assistant Professor, Department of Veterinary Pathology

⁶Professor and Head,

⁷Professor and Head, Department of Clinics

surgical management and histopathological features of perineal fibroma in a cross - bred Jersey cow.

CASE HISTORY AND CLINICAL EXAMINATION

A cross-bred Jersey cow was presented to the Large Animal Surgery out-patient unit, Veterinary Clinical Complex, Namakkal, with a mass in the perineal region for past 3 months (Fig.1). According to the owner, the mass had progressively increased in size over time. A smaller adjacent mass also noticed. Ulceration and scanty bleeding from the mass were reported. On clinical examination, a firm pedunculated mass arising from the vulvar region and hanging in the perineal area was observed. The mass was non-painful on palpation and showed areas of ulceration with mild hemorrhage. A smaller adjacent mass was also present near the base of the primary mass. No difficulty in urination or defecation was observed.

SURGICAL MANAGEMENT

Epidural anesthesia was achieved by using 2% lignocaine at the sacro-coccygeal junction. Local infiltration was performed with 2% lignocaine around the mass. The tumor mass was circumscribed carefully after ligation of blood vessels followed by excision of the mass. The skin was apposed using sterile cotton thread by cross mattress pattern (Fig.2). inj. strepto-penicillin @20,000 IU/kg IM, inj. chlorpheniramine maleate @0.5mg/kg IM were given post operatively for 5 days. Surgical wound dressing with solution. povidone iodine

followed by application of ointment loraxane was advised twice daily for a week. Complete healing of surgical wound was observed in 10 days after surgery and no signs of recurrence were observed.

GROSS FINDINGS

The excised mass was firm in consistency with an irregular surface. Areas of ulceration and mild hemorrhage were evident externally. On cut section, the mass appeared white to gray with dense fibrous tissue arrangement.

HISTOPATHOLOGICAL FINDINGS

Representative tissue sample from the excised mass was fixed in 10% formalin and the sectioned slides were stained with Haematoxylin and Eosin for histopathological analysis. Histopathological examination revealed proliferation of spindle shaped fibroblasts with abundant collagen deposition arranged in a whorled pattern suggestive of fibroma (Fig.3).

DISCUSSION

Fibroma is a benign connective tissue tumor commonly reported in the skin and reproductive tract of domestic animals (Siva *et al.*, 2024; Weiss and Goldblum, 2001). In cattle, perineal and vulvar fibromas are relatively uncommon neoplasms (Yeruham and Perl, 2001). The present case exhibited characteristic features of fibroma including slow progressive enlargement, firm consistency, pedunculated appearance

and absence of pain on palpation (Siva *et al.*, 2024). The ulceration and scanty bleeding observed in this case might be attributed to repeated trauma and friction against surrounding structures (Philip *et al.*, 2022). The development of an additional smaller mass adjacent to the primary growth may indicate continuous fibroblastic proliferation (Weiss and Goldblum, 2001). Histopathological findings of spindle-shaped fibroblasts arranged in interlacing bundles with abundant collagen fibers were consistent with the classical microscopic appearance of fibroma described previously (Siva *et al.*, 2024). Complete surgical excision remains the treatment of choice for fibroma because of its benign and localized nature (Philip *et al.*, 2022). In the

present case, surgical removal under caudal epidural anesthesia and local infiltration anesthesia resulted in successful recovery without complications. Prognosis following complete excision is generally favorable with minimal chances of recurrence (Philip *et al.*, 2022).

CONCLUSION

Perineal fibroma in cattle is a benign, slow in growth connective tissue tumor that can be successfully managed by complete surgical excision. Histopathological examination is essential for confirmatory diagnosis. Early surgical intervention ensures favorable prognosis with minimal recurrence.



Fig.1. Pedunculated mass in the perineal region



Fig.2 . Post resection

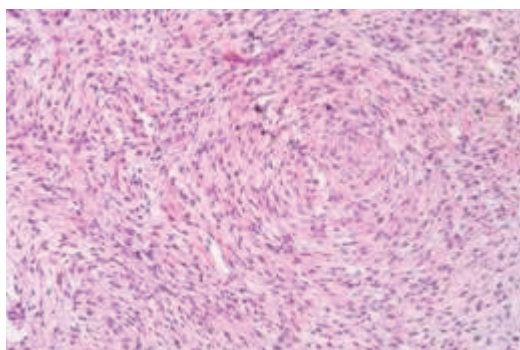


Fig.3. Proliferation of spindle shaped fibroblasts arranged in a whorled pattern H&E × 100

REFERENCES

- Siva, S., Sarangabani, R., Pazhanivel, N. and Rao, G.V.S. (2024). Histopathology and immunohistochemistry of an atypical case of cutaneous fibroma in a crossbreed cow: a case report. *The Indian Veterinary Journal*, **101**(4), 59–61.
- Philip, L.M., Ramankutty, S., Praveen, M.K., Lavanya, B., Joshi, S., Lekshmi, S.L., Anoop, S. and Martin, K.D.J. (2022). Surgical excision of bilateral interdigital fibroma in a crossbred HF cow – a case report. *Journal of Veterinary and Animal Sciences*, **53**(1), 117–120.
- Yeruham, I., & Perl, S. (2001). Fibroma on the end of the tail of a cow - a case report. *Berliner und Münchener Tierärztliche Wochenschrift*, **114**(3–4), 142–143.
- Weiss, S.W. and Goldblum, J.R. (2001). Benign Fibrous tissue tumors. In: Enzinger and Weiss's Soft Tissue Tumors, 4th ed. (Weiss, S.W. and Goldblum, J.R. Eds). Mosby, St Louis. P. 249.
- Vegad, J.L. (2018). A textbook of veterinary general pathology (2nd ed.). International Book Distributing Co.Pg.no : 351,352