

DIAGNOSIS AND SURGICAL MANAGEMENT OF VENTRAL HERNIA IN A PREGNANT DOE

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Abstract: Ventral hernia involving the gravid uterus is an uncommon condition in pregnant goats. A 5-year-old multiparous doe in late gestation was presented with a progressively enlarging right ventrolateral abdominal swelling associated with difficulty in locomotion and recumbency. Clinical examination revealed a reducible swelling containing the gravid uterus, and radiography confirmed fetal presence within the herniated uterus. Caesarean section was performed under local anaesthesia, resulting in the delivery of two live fetuses. The uterine incision was repaired, and a 10-cm abdominal muscular tear was corrected by herniorrhaphy. The doe recovered uneventfully. Advanced pregnancy-associated abdominal wall weakness was considered the probable cause.

Keywords: Doe, ventral hernia, pregnancy, gravid uterus, caesarean section, herniorrhaphy, fetuses.

I. INTRODUCTION

Hernia is the protrusion of visceral organs or tissues through a natural or acquired opening. Based on location, hernias are classified as umbilical, inguinal, scrotal, diaphragmatic, abdominal, perineal, and ventral. Clinically, they may be reducible or irreducible (Parvez et al., 2016). A hernia consists of a hernial sac, ring, and contents. A ventral hernia occurs when abdominal viscera protrude through a defect in the ventral abdominal wall. It may result from trauma, horn thrusts, blunt injury, excessive stretching or straining of abdominal muscles during pregnancy and parturition, or weakness or rupture of the prepubic tendon. (Prarthana *et al.*, 2026, Preethi *et al.*, 2018) It is more frequently observed in pluriparous animals during advanced pregnancy, particularly with multiple fetuses. (Singh *et al.*, 2022)

II. HISTORY AND CLINICAL OBSERVATIONS

A 5-year-old multiparous pregnant doe in late gestation was presented to the Veterinary Clinical Complex, Nagpur Veterinary College, with a history of progressive swelling in the right ventrolateral abdominal region for four weeks. The swelling increased with advancement of pregnancy and was associated with difficulty in ambulation and recumbency. Clinical

examination revealed a soft-to-firm, reducible swelling that enlarged on straining. Palpation suggested the presence of the gravid uterus within the hernial sac (Fig.1). Radiographic examination confirmed the presence of a fetus within the herniated portion of the uterus. (Fig.2)

III. TREATMENT

Hematobiochemical parameters were within normal limits, and the doe was considered fit for surgery. Preoperative treatment consisted of ceftriaxone (10 mg/kg IM), dexamethasone (2 mL IM), and meloxicam (0.2 mg/kg IM).

Caesarean section was performed with the doe in right lateral recumbency under local infiltration using 2% lignocaine hydrochloride. The skin and peritoneum were incised, and the gravid uterine horn was exteriorised. A single incision was made on the less vascularized area of the uterus, and two live fetuses were delivered. The uterine horn was flushed with 100 mL metronidazole and closed in two layers using a Lambert suture pattern with No. 2 chromic catgut. The uterus was repositioned into the abdominal cavity, which was lavaged with normal saline. The peritoneum was closed using a simple continuous pattern with No. 2 chromic catgut. A 10-cm tear in the lower abdominal musculature was repaired using horizontal mattress sutures with No. 2 Prolene. The skin was closed using simple interrupted sutures with No. 2 silk.

Postoperatively, 5% dextrose (15 mL/kg IV) was administered for three days, while ceftriaxone (10 mg/kg IM) and meloxicam (0.5 mg/kg IM) were administered for seven consecutive days. The doe resumed feed intake the following day and recovered uneventfully. Skin sutures were removed on the 12th postoperative day.

IV. DISCUSSION

Ventral hernia is relatively uncommon in pregnant does and may occur due to trauma, accidents, fighting, or weakness of the abdominal musculature. In the present case, there was no history of trauma or accident, suggesting weakness of the abdominal muscles associated with advanced pregnancy as the probable cause. Since the doe was presented during late gestation with the gravid uterus occupying the hernial sac, caesarean section followed by herniorrhaphy was performed. Two live fetuses were successfully delivered, and the doe recovered uneventfully. Surgical intervention can be considered an effective approach for managing ventral hernia associated with advanced pregnancy in does. (Lavanya et al., 2026)

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Fig.1. doe with ventral hernia



Fig.2. Radiographic image of hernia with fetus