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# Dystocia Due to Stenosis of Vulva and Subsequent Fetal Emphysema in A Hf Cross Bred Cow

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#### **ABSTRACT**

Dystocia due to stenosis of vulva and subsequent fetal emphysema in Holstein Friesian heifer and its successful management by episiotomy is reported.

Key words: Premature vulva, Episiotomy, Heifer

#### INTRODUCTION

Vulval stenosis in heifers may be a congenital or developmental defect. It may lead to failure of obliteration of caudal portion of the vagina and a cause for dystocia<sup>1</sup>. Vulvar stenosis is a maternal cause for dystocia due to exhaustion of maternal expulsive forces during parturition<sup>2</sup>. Here, we report a case of dystocia in a HF heifer due to vulvar stenosis followed by fetal emphysema and delivery of the fetus through episiotomy operation.

#### **History and Clinical Observations**

A full term pregnant Holstein Friesian heifer was brought with the history of signs of parturition since previous day afternoon. The clinical examination of the animal showed a pale visible mucus membrane, temperature of 38.7°C, heart rate of 70/min., respiratory rate

of 26/min and continuous straining. The vaginal examination could not be performed due to stenosis of vulva. During rectal examination the fetus was palpable in pelvic cavity and it was crepitating due to emphysema. Based on the clinical, vaginal and rectal examination, it was confirmed that the animal was having stenosis of vulva and it was a delayed case of dystocia. Since it was unable to pass the hand pervaginum, it was decided to perform episiotomy to deliver the fetus.

#### TREATMENT AND DISCUSSION

The vulval lips were washed and prepared aseptically. The episiotomy was performed on dorso-lateral aspect of one side of vulval lips (Figure-1). Vaginal examination after episiotomy revealed that the cervix was fully dilated.

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The fetus was in anterior longitudinal presentation (P1), dorso-sacral position (P2) with bilateral shoulder flexion (P3). Due to emphysematous fetus and dry birth canal, it was unable to correct the postural abnormality. To aid easy manipulation of fetus, the luke warm water of 10 litres was infused into uterus and further the birth canal was lubricated with liquid paraffin. Then the fetal limbs were corrected and delivered a dead male emphysematous fetus by traction (Figure-2). The episiotomy incision on both the sides was closed by vertical mattress suture by using absorbable No. 2 catgut. Post operatively the animal was treated with inj. DNS (5 litres, I/V), inj. Calciumborogluconate (450 ml, I/V), inj. Enrofloxacin (1500 mg, I/M), inj. Meloxicam (160)I/M), inj. mg,

Chlorpheniramine maleate (100 mg, I/M) and inj. Oxytocin (30 IU, I/V). The antibiotic, antihistamine and analgesic were continued for 5 days and the animal recovered uneventfully.

Vulvar stenosis is a developmental defect that might result in dystocia during first calving due to inadequate space. This defect does not affect the conception and progress of pregnancy. In the reported case the pregnancy reached full term and parturition started normally but was not progressed due to vulvar stenosis. Congenital stenosis of vulva resulting in dystocia and its successful management through episiotomy was recorded heifers<sup>1</sup> and <sup>3</sup>. In the reported case also episiotomy was performed and successfully the fetus was delivered.



Figure - 1



Figure -2

#### CONCLUSION

Vulvar stenosis in a HF heifer caused dystocia and subsequent fetal emphysema. It was treated by dorsal episiotomy and emphysematous fetus was removed.

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