



Episiotomy Approach in Management of Dystocia Due to Vulval Stenosis in A Crossbred Jersey Heifer

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ABSTRACT

A case of dystocia due to vulval stenosis in a crossbred Jersey heifer and its management by episiotomy is reported and described.

Key words: Heifer, Vulval Stenosis, Dystocia, Episiotomy.

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INTRODUCTION

Stenosed vulva contributes maternal type of dystocia in a cow under obstruction of birth canal and leads to exhaustion of expulsive forces (Srinivas *et al.*, 2007). Dystocia due to stenosis or constriction of the vulva is more commonly reported in heifer. Vulval stenosis in a heifer is a congenital defect affecting the complete development of vulva. Congenitally fused vulva labia syndrome is defined as a variable occlusion of the labia majora by connective tissue (Yilmaz *et al.*, 2014). The present case describes the episiotomy approach in management of dystocia due to vulval stenosis in a crossbred Jersey heifer.

CASE HISTORY AND OBSERVATIONS

A two and half year old cross bred Jersey heifer was presented to Obstetric unit of Veterinary College and Research

Institute, Orathanadu with the history of complete gestation and straining for calving since 24 hrs. On clinical examination the animal was found to be apparently normal with rectal temperature of 102°F. Vaginal observation revealed foul smelling discharge with shrunken vulva.

Since the vulval opening was only 4cm in diameter, on speculum examination the fetus was visualized with anterior longitudinal presentation, dorsosacral position and laterally deviated head. On rectal examination, foetus was palpable with no fremitus and foetal reflex. The case was diagnosed as dystocia due postural abnormality coupled with vulval stenosis.

TREATMENT AND DISCUSSION

The perivulvar area was cleaned with 0.1 per cent KMnO₄ followed by 7.5 per cent povidone iodine scrub solution. Under low caudal epidural anaesthesia with 4 ml of 2%

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Fig. 1: Incision on the vulva (Episiotomy)



Fig. 2: Vulval suture with PGA 1.0

lignocaine hydrochloride, a gentle incision was made on '2' ° clock and '11' ° clock position of about 6 cm length on each vulval lip which resulted in extension of the diameter of the vulval opening (Fig. 1). Further vaginal examination resulted in correction of postural abnormality and aid in delivery of dead male foetus by gentle traction with lubrication. The incised vulval lips were sutured separately by simple interrupted pattern using Polyglycolic acid 1.0 (Fig. 2) with the perfect vulvar contour. The animal was treated with injection streptopenicillin @ 25,000 IU/kg b.wt I/M; injection Flunixin@ 0.5 mg/kg b.wt I/M; injection, Chlorpheniramine maleate @ 0.5 mg/kg b.wt I/M; Oint. Drez's - 30g (apply on vulval region thrice a day) 7 days postoperatively and had an uneventful recovery. The animal was followed up for two months and the proper vulval contour was ensured.

Vulva encompasses of two labia with dorsal and ventral commissure. Often vulval lips meet evenly and do not gap each other. It acts as an anatomical barrier by proper closure in preventing infection. Under oestrogen dominance during parturition, it relaxes extensively and regain after parturition. Etiological factors for vulval stenosis could be a congenital, autosomal recessive gene, oestrogen imbalances during prepubertal period and drug exposure during embryonic development (Tiwari *et al.*, 2016).

Vulval contour is being distorted by the congenital, acquired trauma, negative energy balance and reconstructive surgery performed in the vulva (Gautam and Nakao, 2009). Any post operative complication such as wound dehiscence, swelling, foecal contamination, uneven tear, granulomatous formation may lead to disruption in vulval contour in turn urovagina, pneumovagina gets preceded. Pooling of dung and urine will be the consequences and persistent infection and endup with infertility (Raja *et al.*, 2012). Dystocia due

to stenosed vulva and its successful management through reconstructive surgery by episiotomy and vulvoplasty was also recorded in heifers (Bhatt *et al.*, 2012; Raja *et al.*, 2019; Ravikumar *et al.*, 2017).

CONCLUSIONS

Vulval reconstructive surgery such as episiotomy, vulvoplasty and labioplasty are the minor reproductive surgeries which could affect the contour of the vulva and fertility gets compromised; hence postoperative follow up could help in maintaining the vulval contour and ensure the future fertility.

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CONFLICT OF INTEREST

None.

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