

CLINICAL MANAGEMENT OF DYSTOCIA DUE TO INCOMPLETE CERVICAL DILATATION IN SHEEP

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Abstract: Ewes affected with incomplete cervical dilatation are taken in to consideration for this study. The cervix of the affected ewes were treated with Valethamide bromide and calcium and were massaged with 30-40 ml of warm gel of carboxy methyl cellulose for 5 minutes and repeated for every 30-40 minutes. Complete cervical dilatation was achieved within 120 to 140 minutes and all the ewes recovered uneventfully.

Keywords: Ewe, Incomplete cervical dilatation, Sodium carboxy methyl cellulose

INTRODUCTION

Incomplete dilatation of the cervix is one of the commonest maternal causes of dystocia in goats and sheep. Failure of the cervix to dilate in ewes is termed as ring womb (Roberts, 1971). Some studies concluded that its incidence ranged between 20 to 30 percent of all the dystocia cases presented (Noakes et al., 2001). Manual dilatation of the cervix in cattle and mare has been discussed elaborately in earlier studies (Jackson, 2004), but reports of manual dilatation of cervix in ewes were scanty. Imperfect cervical dilation (ICD) and its successful management in six ewes were discussed in detail.

CASE HISTORY AND OBSERVATION

A total of six pregnant ewes after completion of term which were presented to the Veterinary Obstetrics unit of Veterinary Clinical Complex, NTR College of Veterinary Science, Gannavaram over a span of two months were included in the present study. The clinical signs exhibited by the ewes include restlessness, nervousness, abdominal discomfort, tail switching, depressed appetite, udder and teats engorged, increased respirations, sides caving in, vulval area swollen, mucous discharge and sagging of the vulva. All the ewes upon abdominal palpation revealed the presence of fetus. The external examination revealed vulval

*Received July 11, 2017 * Published Aug 2, 2017 * www.ijset.net*

oedema, enlargement of udder with secretion of colostrum. Detailed obstetrical examination revealed incomplete dilatation of the cervix in all the ewes that were presented. The details of the ewes with obstetrical findings and outcome of the treatment was presented in Table 1.

Table 1: Obstetrical status of the ewes affected with maternal dystocia (n=6)

S. No	Case No	Age of the ewe (months)	Parity	Degree of cervical dilatation	Time taken for complete cervical dilatation	Malposture of the fetus	Sex and Condition of the fetus after delivery
1	9376	18	1	One finger	120 minutes	Normal	Male dead
2	10283	18	1	One finger	130 minutes	Left Lateral deviation of head	Female dead
3	10302	22	1	One finger	120 minutes	Normal	Female dead
4	10311	22	1	One finger	120 minutes	Normal	Female dead
5	11013	24	1	One finger	140 minutes	Normal	Female dead
6	11281	36	3	Two finger	120 minutes	Right shoulder flexion	Male dead

TREATMENT

The degree of cervical dilation was enhanced by administration of Inj. Valethamate Bromide (Epidosin) @ 2 ml intramuscularly and Inj. Calcium Sandoz @ 5ml by slow intravenous administration. Medical management of incomplete cervical dilatation did not yield favourable results hence cervical massage with 2 per cent sodium salt of carboxyl methyl cellulose gel was attempted as adopted for treatment of incomplete cervical dilatation in buffaloes as described by Honaparke et al. (2009). In this procedure, the cervix of the affected ewes was massaged with 30-40 ml of warm gel of carboxyl methyl cellulose for 5 minutes. After assessing the progress in cervical dilatation the procedure was repeated for several times at 30 minutes intervals with simultaneous massage of the cervix. The ewes were examined for complete dilation of cervix after repeated cervical fanning and feathering and the time required for complete cervical dilatation was recorded. Complete cervical dilatation was achieved in all the treated ewes within 120 to 140 minutes (with an average of 125 minutes) after initiation of manual massage. The fetuses of 4 ewes had normal presentation, position and posture where as, left lateral deviation of head and unilateral right shoulder flexion was recorded in one each. Mutational operations were performed to correct the postural abnormality and traction after lubrication was applied in all the cases to deliver dead fetuses of either sex. Post operative treatment included Inj. Intacef (Ceftriaxone) 500 mg

intramuscularly for 5 days along with Inj. Melonex @ 2 ml intramuscularly. Ropitas boli were placed intra-uterine to avoid retention of placenta. All the ewes recovered uneventfully.

DISCUSSION

Ring womb was one of the common causes of dystocia. Existence of ring womb (incomplete cervical dilatation) as a cause of dystocia in ewes has been reported (Edward and Jones, 1957) which was opined to associate with imbalance of calcium and magnesium. In the present case the obstetrician's lubricated finger was introduced into the partially opened cervix and is moved around with centrifugal action, exerting lateral pressure on the rim of the cervix. Sometimes the cervix will be felt to open like the shutter in a camera in response to pressure (Jackson, 2004).

Low levels of both calcium and glucose (Sandabe et al., 1997), uterine inertia and cervical inertia have also been attributed to the cause of ring womb in ewes (Roberts, 1971). Dilatation of cervix depends on the resistance caused by visco-elastic properties of cervix and the force induced by uterine contractions (Breeveld-Dwarkasing et al., 2003). Several factors were attributed to incomplete dilatation of cervix such as the number of fetuses, the duration of parturition and the preparedness of the ewe to lamb. Attempts to deliver the fetus through partially dilated cervix should be avoided as it caused injury to the birth canal leading to internal haemorrhage, adhesions and sometimes death.

It was concluded from the present study the incomplete dilatation of cervix in ewes could be effectively treated by cervical massage with warm gel of carboxy methyl cellulose along with medical treatment which could avoid caesarean section which was otherwise adopted as the only treatment of these cases. The disadvantage with caesarean section is that it requires intensive post operative care and leads to compromised future fertility of the dam.

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