TREATMENTS OF DYSTOCIA IN KARADI EWES IN SULAIMANI PROVINCE

***Faraidoon A.M. Amen *Talib G.M. Ali**

*Department of Surgery and Theriogenology, College of Veterinary Medicine, University of Sulaimani, Kurdistan region- Iraq

(Received 31 August 2009 , Accepted 30 December 2009)

Keywords; Karadi breeds, dystocia, fetal maldisposition

ABSTRACT

The study was conducted on 85 clinical cases of Karadi breeds of Iraqi ewes, suffering from dystocia, which were brought by the farmers to A.I center of veterinary Directorate and the Veterinary. Teaching Hospital, College of Veterinary Medicine, Sulaimani University to be treated during lambing season.

The age of animals ranged from 2-4 years, and the number of lambing ranged from 1-3 times. One of the following treatments was chosen;

1) Correction of fetal maldisposition and traction (n=25), 2) Medical treatment of ring womb when fetal membranes were not yet ruptured (n= 17) or 3) Cesarean section was performed, when delivering per vaginum was judged to be impossible (n= 43). Medical treatments consisted of a combination of calcium borogluconate 2% (40 ml S.C.) with Estradiol benzoate 17-β (2mg i.m.). Positive response been indicated when the method of treatment showed good prognosis. The results showed that cesarean section had a higher positive response (83.7%), while manual correction and traction showed 60% response. Poor response was observed in the medical treatment group (41.1%). It was concluded from this study that cesarean section was the safest method of the treatment especially if performed as early as possible.

INTRODUCTION

Dystocia is often a major cause of lamb loss in the flock (1) and may result in great economic loss to the farmers. Obstetricians have usually regarded dystocia as being either maternal or fetal in origin (2). Failure of the cervix to dilate (ring womb) is the a common form of dystocia in sheep and goats (3-6), and has been suggested in sheep to be due to hypocalcaemia and or / ingestion of estrogen by pregnant animals, present in fungi or clover

(7, 8). There are several procedures used for treatment of dystocia in ewes, including; medical, correction of fetal maldisposition with traction and cesarean section (2 and 9). Cesarean section was reported to be an effective method for treatment of most types of dystocia and was safety for the dam as well as the fetus, especially when performed as early as possible after onset of labor (10 - 13). The most common indications for C.S. in the ewe are failure of the cervix to dilate and relative or absolute oversize of the fetus (2, 9, and 10). In rare cases, fetal emphysema and monsters may require a C.S. to deliver the fetus (9). The successes of treatments are related to several factors including absence of infections, cervical prolapse and trauma resulting from attempted delivery of fetus by farmers (12, 13, and 14). The objective of this study was to find out the safe method for treatment of dystocia in Karadi ewes under clinical condition and identify factors affecting the success rate of the different types of treatments.

RESULTS

The results of different methods of treatments are shown in Table -1. Cesarean section had a higher positive response (83.7 – 36 / 43), while manual correction and traction showed 60 % (15/25) response. Poor response were observed in the medical treated group (41.17 %) (7/ 17).There was a significant difference ($P < 0.01$) between different methods of treatments. The numbers of ewes that did not conceive on the subsequent estrus following C.S. (16.28 %), all suffered from chronic metritis after surgery.

Table 1: The results of different methods of treatments of dystocia.

Types of treatments	Number	Positive response	Efficiency %
Manual (Correction and Traction)	**25**	**15**	**60.00a**
Pharmacological *(Estradiol 2mg i.m + Calcium 40 ml s.c.)	**17**	**7**	**41.17b**
Cesarean section	**43**	**36**	**83.72c**

There was a significant difference ($P < 0.01$) between different letters.

*** Estradiol Benzoate: Each ml contains 2mg of synthetic oestradiol mono benzoate. Aburaihan pharmaceutical Co. Iran.**

DISCUSSION

The study showed significant difference (P<0.01) between different methods of treatment. These findings are in agreement with (2, 3 and 6) in sheep. (5 and 13) reported similar observations in goats. Uterine infections are a common post- surgical complication in ewes reported by (3, 11and 13).

Cesarean section was performed in the primiparous and two years old ewes for almost of all treatments. The difference in the number of primiparous and the number of multiparous dams requiring C.S. was similar to that reported by (3, 4, 12, 13,15and 16). However, the C.S. was performed more frequently in twin births (60 %) than in single births (40 %), and in ewes having male lambs (65.4 %) than those having female one (34.5 %). (3, 13 and 16) have made similar observations. The higher incidence of C.S. observed in ewes having male lambs might be due to their higher birth weight (6, 13, and 15-18). The survival rate for lambs treated with different methods was 83.72 % in surgical, 60 % in manual and 41.17% in medical one. These findings were similar to those reported by others (3, 6, 7 and 15). It was concluded from this study that cesarean section appears to be a safe and successful procedures for management of dystocia in Karadi ewes if it was performed as early as possible. However, manual traction after correction is the second choice.

علاج عسر الولادة في النعاج الكرادي في محافظة السليمانية

فريدون عبد الستار محمد أمين ، طالب غيدان منت علي

قسم الجراحة والولادة، كلية الطب البيطري، جامعة السليمانية – السليمانية - العراق

ألخلاصة

أجريت الدراسة على 85 حالة سريريه من النعاج الكرادي العراقية، كانت تعاني من عسر الولادة تم جلبها بواسطة المربين إلى المستشفى البيطري التعليمي التابع لكلية الطب البيطري/جامعة السليمانية والى مركز التلقيح الصناعي التابع للبيطرة في السليمانية، خلال الفترة (موسم الولادة) من شهر تشرين الثاني 1993 إلى كانون الأول 2004. بلغت أعمار الحيوانات بين 2-4 سنة وعدد الولادات من 1-3 مرات. عولجت الحالات بإحدى الطرق التالية بعد إجراء فحص دقيق للحالة:

تصحيح وضع الجنين وسحبه (العدد = 25 نعجة).

العلاج الدوائي لحالات عدم توسيع عنق الرحم عندما لم يتمزق الغشاء الجنيني (العدد: 17).

أجراء العملية القيصرية عندما لايمكن إخراج الجنين عن طريق المهبل (العدد = 43). شمل العلاج الدوائي مستحضر كالسيوم 2 % (40 سم3 تحت الجلد) مع هرمون الاسترادايول بنزويت -17 بيتا (2ملغم بالعضل).

اعتبرت النتيجة موجبة عندما يكون مآل الحالة جيدا. أظهرت النتائج أن العلاج بالعملية القيصرية أعطى أفضل النتائج (83.7 %) يليه العلاج اليدوي بالتصحيح والسحب (60 %) ، أما العلاج الدوائي فكانت نسبة الاستجابة فيه (41.1 %) . وقد استنتج من الدراسة أن أفضل علاج لحالات عسر الولادة في النعاج هي الجراحة القيصرية إذا ما أجريت مبكرا.

REFERENCES

1- Mcsporran, K.D., 1980. Dystocia in sheep. In: Morrow, D.A., (2nd Ed.). Current Therapy in Theriogenology. W.B. Saunders Co., Philadelphia, P.P. 916- 918.

2- Arthur, G.H., Noakes, D.E., Pearson, H. and Parkinson, T.J., 1996. Veterinary Reproduction and Obstetrics. 7th ed., W.B. Saunders Co. Ltd, England.

3- Taha, M.B., Majeed, A.F. and Ali, J.B., 1987. Dystocia in Awassi ewes. Mesopotamia J. of Agric., 19: 121-128.

4- Majeed, A. F. and Taha, M.B., 1989. Preliminary study on treatment of ring womb in Iraqi goats. Anim. Reprod. Sci., 18: 199- 203.

5- Majeed, A.F. and Taha, M.B., 1995. Obstetrical disorders and their treatment in Iraqi Awassi ewes. Small Rumin. Res., 17: 65-69.

6- Al-Timimi. I.H. (1997). Cesarean section in ewes: Causes and treatment. The veterinarian. 6(1) :89-94.

7- Ward, W.R., 1975. The etiology of ring womb or partial dilatation of the cervix. Vet. Annual. 5th issue, Ed Granseel and Hill, Bristol, PP. 75-78.

8- Adams, N.R., 1986. Measurement of histological changes in the cervix of the ewes after prolonged exposure to estrogenic clover or estradiol-17β. Aust. Vet. J., 63: 279-288.

9- Roberts, S.J., 1986. Veterinary Obstetrics and Genital Diseases. 3rd Ed, Wood- Stock, Vermont, U.S.A.

10- Cox, J.E., 1982. Surgery of the reproductive tract in Large Animals. Liverpool, Liverpool University Press, PP, 136.

11- Scott, P.R., 1989. Ovine Caesarean Operation: A study of 137 field cases. Br. Vet. J., 145: 558-564.

12- Majeed, A.F., Taha, M.B. and Azawi, O.I., 1993. Cesarean section in Iraqi Awassi ewes: A case study. Theriogenology. 40: 435- 439.

13- Majeed, A.F., 1994. Obstetrical Problems and its management in Iraqi goats. Small Rumin. Res., 14: 73-78.

14- Scott,P.R. 2005. The management and welfare of some common ovine obstetrical problems in the United Kingdom. Vet. J. 170:1: 33-40.

15- Grommers, F.J., Eliving, L. and VanEldik, P., 1985. Parturition difficulties in sheep. Anim. Reprod. Sci., 9: 365-374.

16- Scales, G.H., Burton, R.N. and Moss, R.A. 1986. Lamb mortality, birth weight and nutrition in late pregnancy. N.Z.J. Agric.Res.,29: 75-82.

17- Cloate, S.W.P., Anna, J.S., TenHoop, J.M., Lombard, P.J.A. and Franken, M.C. 1998. Ease of birth relation to pelvic dimensions, litter weight and conformation of sheep. Small. Rumin. Res. 31:1: 51-60.

18- Binns, S.H., Cox, I.J., Rizvi, S. and Green, L.E. 2002. Risk factors for lamb mortality on UK sheep. Preven. Vet. Med. 52: 3-4: 287-303.