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BOVINE DYSTOCIA IN IRAQ TYPES AND TREATMENTS

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ABSTRACT

Study was conducted on 149 case of cross breed bovine dystocia referred to Department of Theriogenology, College of Veterinary Medicine and Al-Wihda Cattle station, Baghdad, Iraq.

Results showed that 87.5% of bovine dystocia were successfully relieved by cesarean section (C.S), 85.5% success was achieved by correction an traction, 71.4% by fetotomy and 50% by hormonal treatment. Most of the cases subjected to C.S, were heifers. Details concerning number of cases subjected to C.S, indications, positive response, state of pregnancy, number of claves recovered, number of male/ female and survival rate of claves were listed in two enclosed tables. From results we may conclude that C.S was the best indicative treatment of dystocia, particularly when all the trails and efforts of treatments failed, inspite of the reasonable results obtained from various treatments mentioned in other cases.

INTRODUCTION

Dystocia is a critical emergency condition which needs an immediate intervention and in such cases prognosis are usually unpredictable for dam and fetus.

Incidence of bovine dystocia can be affected by several factors. Variation among countries has been recorded by as 12.2% in Sweden and 2.1% in Denmark respectively.

Twin birth, male calves and parity are another factors that could increase incidence of dystocia. Nevertheless several etiological

factors of bovine dystocia have been reviewed by many authors and they are all agreed that incidence of dystocia as a result of fetal defectal factors is usually higher than that of the maternal defectal factors. Plenty of work has been done to relieve cases of dystocia and yet trails are continuous to find out the best. This study was conducted to investigte the most common causes of bovine dystocia in Iraq and the best reliable method of treatment.

MATERIALS AND METHODS

One hundred and fourty nine clinical case of cross breed bovine dystocia were included in this study, cases were handled at the Department of Theriogenology, College of Veterinary Medicine and Al-Wihda cattle station, Baghdad, Iraq, during the years of 1989-1993. Some of the dystocia cases were in heifers and some in cows that had multiple birhts. Most cases of dystocia referred to Department of Theriogenology had been previously subjected to frequent manipulatory examinations & trials of relievement by other veterinarians. Decision of treatment was made after careful examination of fetus& dam.

Treatments were arranged in the following order:

1. Correction and traction: Eighty three case of fetal maldispoition were subjected to different steps of mutation. Corrected feti were tracted with or without obstetrical tools.

2. Partial fetotomy: Seven cases of oversized dead feti were sujected to fetotomy. This operation was preceded in two cases by injection of 6-8 ml of 2% xylocaine (Astra Sweden) as epidural anaesthesia.

3. Horonal treatment: Ten cases of incomplete cervical dilation were treated hormonally as follows, 3 cases were given 20 mg of estradial benzoate I.M., another 3 cases were treated with 20 mg estradial benzoate I.M., then followed by injection of 50 I.U. Oxytocine I.M. 30 minutes later. The remaining 4 cases were injected

with 15 mg of luprotiol I.M. (Prosolvin, intervet international, Boxmeer, Holland).

4. Episiotomy: In one case of dystocia, vulval opening was dilated by doing an incision of about 10 cm length at its dorso- lateral commissure using sharp scalpel. Operation was preceded by injection of 20 ml of 2% Xylocaine as local infiltration anaesthesia, repair of incision was performed soon after delivery.

5. Cesarean section: Fourty eight cases of dystocia listed in table (2) were subjected to C.S as indicative treatment. Oblique lower left flank approach was chosen as site of operation. This site was prepared and anaesthetized locally by infiltrating 40-50 ml of 2% xylocaine. Six to eight pessaries (Utocyl, CIBA-GHIGY) were placed in the uterine cavity after fetal expulsion. The recovered cows were given a single dose of 40-50 I.U oxytocine and 20 ml of long acting oxytetracycline I.M. (Tetroxy L.A 20%; Bimeda, Dublin).

RESULTS

Results in Table (1) shows that 71 out of 83 case of dystocia (85.5%) were relieved by means of correction and traction, and 5 out of 7 cases (71.4%) were responded to partial fetotomy. However, 5 out of 10 cases of incomplete cervical dilatation (50%) were responded to hormonal treatment. The single case of episiotomy responded normally. The responsiveness to C.S. was found to be 87.5% (42 out of 48 case of dystocia). Details concerning indications of C.S. and number of cows responded in each case is reported in Table (2).

Table (3) shows that 45 calves were removed by C.S as single birth, 27 calve of which were males and 34 were alife. Four calve were removed by C.S from 2 cases of dystocia as twin delivery, 3 calves of them were males and 2 were alife.

Three calves were removed from a single case of dystocia as a triple, all of them were males and 2 of them were alife.

DISCUSSION

Our results showed that 71 out of 83 case of dystocia due to fetal maldisposition were corrected and delivered by traction. Although correction and reasonable traction is unharmful primary technique used to relieve dystocia, but its failure may lead to further complications. Partial fetotomy was the other alternative treatment applied to solve dystocia primarily when the fetus is dead and no fetal fludis ramain in the uterus. Although 71.4% of the cases responded successfully to treatment with this technique, it was an exhausting unsafe method for the cow and the veterinarian. It would be possible, almost in all cases that were handled by fetotomy, to use other techniques if those cases would have been brought to us at earlier time without excessive manipulations.

Those cases, actually, were brought to the Department of Theriogenology after subjection to many unexperienced veterinaries, hence, such cases arrived at critical conditions and their treatments become more difficult.

Resonse of hormonal treatment in cases of insufficient cervical dilatation was limited to 50% since the majority of cases were associated with uterine as a result of prolonged labour and muscular fatigue. Episiotomy is a simple opertaion with which a single case of vulval stenosis was readily relieved. Such operation is usually indicated to prevent vulval or recto-vaginal laceration at calving.

The results of this study showed that highest response for treatment of dystocia was with the use of C.S. (Table 1) which is agreed with many investigations. However, most of these cases were heifers which justify the use of C.S. since they may have premature pelvis or insufficient pelvic dimensions.

Efforts preceded C.S. have been exerted to solve different kinds of dystocia, but failure of such efforts made C.S obligatory. All responses to various types of treatments recorded in this study were given as a result of direct response and recovery manifested soon

after treatment and the follow up we performed on the cases, however, in some cases it was not possible to perform this follow up.

The majority of cases which didn't response to treatment, either died during the course of treatment or soon after and the remaining few cases had developed various degrees of complications such as retained placenta, septic metritis, subcutaneous emphysema and wound infection.

In conclusion, C.S was the best final treatment of dystocia, particularly when all the trails and efforts of treatments failed, inspite of the reasonable results obtained from various treatments mentioned in other cases.

Table 1 : Efficiency of various treatments.

Treatment	No. of cases	Response	Efficiency
Correction & traction	83	71	85.5 %
Fetotomy	7	5	71.4 %
Hormonal	10	5	50 %
Episitomy	1	1	100
C.S	48	42	87.5 %

Table 2 : Indications & Efficiency of c.s.

Indications of C.S	No. of cases	Response	Efficiency
Fetal oversize	27	24	88.8 %
Insufficient cervical dilation	8	7	87.5 %
Vaginal prolapse	6	6	100 %
Irreducible uterine torsion	3	2	66.6 %
Deformity with embryopathy	2	1	50 %
Abnormal P.P.P	2	2	100 %
Total	48	42	87.5 %

Table 3 : Details concerning claves delivered by C.S.

No. of cases subjected to C.S	State of pregnancy	No. of calves removed by C.S.	No. of male/female	No. of lived/dead
45	Single	45	27/18	34/11
2	Twins	4	3/1	2/2
1	Triple	3	3/0	2/1

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عسر الولادة في الابقار في العراق

الانواع والعلاجات

ضياء جعفر خماس و طالب موسى الحميداوي

فرع التوليد والأمراض التناسلية ، كلية الطب البيطري

جامعة بغداد- العامرية- بغداد

الخلاصة

شمل البحث دراسة عسر الولادة في 149 بقرة مضربة تم علاجها في فرع التوليد والأمراض التناسلية بكلية الطب البيطري ومحطة الوحدة لتربية الأبقار ببغداد. أظهرت نتائج العلاج 5ر87٪ نجاح بالعملية القيصرية و 5ر85٪ بالتعديل والسحب و 4ر71٪ بتقطيع الجنين و 50٪ بالعلاج الهرموني. كانت الأباكير تمثل غالبية الحالات التي خضعت للعملية القيصرية.

أن التفاصيل التي تخص عدد الحالات التي اجريت لها العملية القيصرية ودواعيها ونسب الإستجابة وعدد الأجنة التي تم الحصول عليها ذكورا وإناثا اضافة الى نسب الأحياء منها الى الأموات قد تم تدوينها في جدولين لاحقين.

أستنتج من البحث أن العملية القيصرية هي آخر الطرق ولكن افضلها لعلاج حالات عسر الولادة، رغم النتائج المعقولة التي حصلنا عليها باستخدام باقي العلاجات، إلا ان فشل تلك المحاولات والعلاجات قد جعل من العملية القيصرية الحل الأمثل