

Dystocia due to congenital defects in Iraqi ewes at Fallujah
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Abstract

The study was conducted on 14 clinical cases of congenital anomalies in Iraqi ewes out of 474 Iraqi ewes suffering from dystocia cases presented to the clinic of department of obstetrics\ College of Veterinary Medicine/ University of Fallujah and Private Clinic) during the period from 1995 to 2017. The Prevalence of anomalies was 2.95% in Iraqi ewes recorded at Fallujah. High prevalence of anomalies were observed in male in this study 9/14 (64.28%) than in female 5/14 (35.72%). Different types of congenital anomalies that leads to dystocia were arthrogyriposis (4/14-28.57%), brachygnathia (4/14-28.57%), hydrocephalus (3/14-21.42%) and ascites (3/14-21-42%). Prenatal losses was noticed in all cases. The methods of treatment used to relief these cases were C.S and fetotomy.

Keywords: Dystocia, congenital defects, Iraqi ewes.

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التشوهات الخلقية المسببة لعسر الولادة في النعاج العراقية

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الخلاصة

أجريت الدراسة على 14 حالة سريرية من التشوهات الخلقية في النعاج العراقية التي تعاني من عسر الولادة من ضمن 474 حالة واردا إلى العيادة الخاصة وعيادة كلية الطب البيطري، جامعة الفلوجة للفترة من 1995-2017. كانت نسبة التشوهات الخلقية 2.95% في تلك النعاج في مدينة الفلوجة، وقد سجلت النسبة في الاجنة الذكور (14/9-64.28%) مقارنة مع اجنة الاناث (14/5-35.72%). لوحظ انواع مختلفة من التشوهات الخلقية والتي ادت الى حدوث عسر الولادة مثل تصلب المفاصل (14/4-28.57%)، انعدام الفك (14/4-28.57%)، موه الرأس (14/3-21.42%) والحين (14/3-21.42%) فقد هلكت جميع تلك الأجنة. اشتملت طرق العلاج لمثل هذه الحالات على العملية القيصرية وتقطيع الجنين.

الكلمات المفتاحية: عسر الولادة، التشوهات الخلقية، النعاج العراقية.

Introduction

Fetal malformation or anomalies is uncommon causes of fetal dystocia in sheep and cattle (1, 2, 3). Hydropsical conditions of the fetus may lead to dystocia such as hydrocephalus, ascites and hydrothorax(4). The real causes of these cases are not understanding. Disturbances in fetal circulation or in lymphatic may lead to anasarca and decreases in urinary excretion in ascites (5). Accumulation of extra fluid in ventricles or dura matter of the brain called hydrocephalus. It is assumed that hydrocephalus may be arise from disfunction in normal blood supply of the cerebrospinal fluid leads to change in production and absorption (5). The affected lambs with hydrocephalus are borne dead or died shortly after birth directly (6). The congenital defect, about 50-60% Of the cases might be due to unknown causes. The other parts 40%, the most common etiology can be divided into three causes: first

genetic or hereditary due to chromosomal abnormalities; second environmental resulted from teratogenic substances and third mixed due to genetic and environmental (7). The objective of this study was to investigate over a period of 22 years, the congenital anomalies in ewes suffering from dystocia in Iraqi ewes at Fallujah.

Materials and Methods

The study was conducted on 14 clinical cases of congenital anomalies in Iraqi ewes out of 474 Iraqi ewes suffering from dystocia cases presented to the clinic of department of obstetrics\ College of Veterinary Medicine/ University of Fallujah and Private Clinic during the period from 1995-2017. Two methods were used for treatment these cases including caesarian section and fetotomy. These cases were diagnosed as Arthrogyryposis, Branchybnathia, hydrocephalus and ascites according to Mekonnen and Moges, (2). The prevalence of each anomalies were counted statistical analysis were done using chi-square test.

Results and Discussion

Out of 474 ovine dystocia 14 lambs 2.95% showed developmental anomalies. Similar results has been observed by several authors (1, 2, 8). The prevalence of the developmental anomalies has been reported to be range from 1.6 to 9.1% in sheep (9). Table 1 showed different from of the lambs defect causing dystocia. It has been shown that there was a statistical difference in the prevalence of the congenital anomalies between males and females. Similar finding have been observed (9, 10). According to body system classification of developmental anomalies (Table-1) showed high frequency of defect in the skeletal system and body cavities. This agreed with observation of (9, 11) but disagreed with finding of (12, 13). This variation managed by the investigators. Arthrogyryposis, is a common anomalies seen in animals. It was observed in four animals (4/14 -28.57%)(fig.1). a similar observation have been notice by (9, 11). The etiology of this condition might be due to autosomal recessive genes or viruses (7, 9, 11, 14). Barchygnathia was observed in four cases (Fig.2) (4/14-28.57%). Two lambs were associated with bull dog. Similar results have been found by (9, 11, 15). It might be caused by recessive genes, viruses and teratogenic plants (7, 9, 11, 14). Hydrocephalus head a prevalence (3/4-21.42%) two male and one female lambs (Fig.3). The condition appeared as an abnormal distension in the upper cranial bone. Results in accumulation of excessive cerebrospinal fluid in the cerebral chambers. A similar observation have been made by (5, 11, 16). And one female (3/4-21.42%) (Fig.4). This might be due to disturbances in fetal circulation or lymphatic that leads to anasarca and decrease in urinary excretion in ascites (5). Ascites were seen in two male lambs. Caesarean operation had a higher positive response as compared with manual extraction, hormonal therapy with PGF2 α and fetotomy which showed poor response. The result corresponded with other finding (2, 17, 18, 19).

Table (1) Dystocia due to congenital anomalies in Iraqi ewes

Congenital anomalies	Male%	Female%	Total%
Arthrogyryposis	3%	1%	4%
Brachygnathia	2%	2%	4%
Hydrocephalus	2%	1%	3%
Ascites	2%	1%	3%
Total	9%	5%	14%



Fig. (1) Arthrogryposis



Fig. (2) Brachygnathia



Fig. (3) Hydrocephalus



Fig. (4) Ascites (bull dog)

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