Macroscopic study of Lesions Affecting Genital Tract of Iraqi Ewes

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Summary

A total of 660 genital tract of adult ewes slaughtered at Baghdad Abattoirs, were examined for the gross pathological conditions .One hundred thirty three (20.22%) of them showed different type of abnormalities of the total genital examined, 157 (23.87%) were pregnant and the rest 503 were non-pregnant ones. Eighteen (11.46%) of the pregnant and 115 (22.86%) of the no pregnant genitalia showed pathological conditions, Ovarobursal adhesions 51(7.72%) and paraovarian cysts 35(5.31%) were the most common abnormalities recorded. In conclusion: Such kind of abnormalities observe in genitalia slaughtered ewe could be considered as the causes of temporary infertility or permanent sterility, never the less, the percentage of slaughtered pregnant ewes was too high.

Keywords: Macroscopical lesions, Genital tracks, Ewes.

Introduction

Local sheep are fertile small ruminants breed in Iraq. Sheep are used mainly for the production of meat, wool, skin and milk (1). Knowledge of the disorders of the female genital tracts is essential for achieving maximum reproductive efficiency (2). However, little information is available on the cause of infertility and reproductive disorders in Iraqi ewes (3 and 4).

Abattoirs provide a useful source of information on types and prevalence of genital tract lesions and abnormalities (5). The present study was therefore undertaken to register the various gross abnormalities in pregnant and non-pregnant genitalia of ewes in Baghdad region.

Materials and Methods

For a period of one year, from Jan up to end of Dec.\ 2010, complete. Female genital tracts of 660 mature ewes (both pregnant and non-pregnant) were obtained from Baghdad abattoirs. Specimens were collected regularly once / week. The specimens were examined within three hours of slaughter, for the detection of gross abnormalities. Uterine tubes were examined, according to Ali (6).

No information was obtained on the identity of individual specimens and accurate data could not be determined on the origin and breed of the ewes, but the samples obtained was considered to be representative of Iraqi sheep population.

Results and Discussion

Genitalia samples 660 were examined, 133 sample (20.22%) showed different types of abnormalities. This incidence found to be higher than what was reported by Badawi (7). However, Shalash and EL-Guindi (8); Javed (9) and Alwan and Amin (10), who have reported 38%; 28.36% and 29% incidence respectively. The result of the examination of the pregnant specimens showed that 18 (11.46%) were found to possess gross abnormalities which is only 2.73 % of total specimens examined (Table, 1). This figure is much lower than what was reported earlier by Javed (9). The difference could be due to different breeds and environment. Cases of ovarobursal adhesions were of 5.73% followed by paraovarian cyst 3.18% and hydrosalpinx 2.55%.The first two abnormalities did not interfere with the transport of ova through the oviduct, while the hydrosalpinx did affect the fallopian tubes of the opposite side of pregnant horns only. Comparatively higher incidence of gross abnormalities was observed in non-pregnant specimens (17.49%). Table, 2 shows various abnormalities in the non-pregnant genitalia. Ovarobursal adhesion (8.35%) was the most common abnormality recorded in the present investigation, Javed *et al.*, (9) has recorded 18.25 % case whereas Long (11) and Sokkar and kubba (3) have recorded 0.4 and 4.5 % cases of ovarobursal adhesions respectively in non-pregnant genitalia .

Paraovarian cyst was seen in 5.96 % of non-pregnant specimens. The cysts were spherical or oval in shape, and about 0.2 – 0.5 cm in size. They were attached mostly to the anterior poles of the ovaries or to the fimbriae of the oviducts. Almost similar (10%) were reported by Javed *et al.*, (9) who recorded it in 6 cases in North of Iraq (Dohuk region) Sofec (12) found paraovarian cyst in 10%.

Nine cases (1.79%) of follicular cyst were observed in the non-pregnant genitalia. Only one cyst with a diameter of 1.2 – 1.5 cm, without functional corpus luteum on the ovaries was seen.

Gross affection of the fallopian tubes included salpingitis (2.19%) followed by occlusion of oviduct (0.39%) and oviduct aplasia (0.19%). Presence of fallopian tube abnormalities in non-pregnant animals only indicated that such kind of abnormalities probably affect fertility of ewes (13).

Uterine gross abnormalities included pyometra (1.19 %), uterine adhesion (0.59%), uterine unicornis (0.39%), and hydrometra (0.19%). Sever adhesions were observed between the uterine horns and body, which could be due to uterine rupture during previous pregnancies, peritonitis, peri-metritis, dystocia. Fetal maceration was seen in 3 cases (0.45%).

In conclusion: such kind of abnormalities observe in genitalia of slaughtered ewe could be considered as the causes of temporary infertility or permanent sterility. It should be recalled that the specimens of this work were collected from ewes which were perhaps slaughtered due to several causes, the commonest amongst them is their infertility, randomly slaughtered sheep including fertile ewes.

Table, 1: Gross abnormalities in pregnant genitalia of Iraqi ewes.

Abnormalities	Right side No	Left side No	Bilateral No	Total No	Percent from	
					Pregnant Specimen=157	Total Specimeni n=660
Ovarobursal Adhesion	3	4	2	9	5.73	1.36
Paraovarian Cyst	2	3	0	5	3.18	0.76
Hydrosalpinx	2	2	0	4	2.55	0.61
Total	7	9	2	18	11.46	2.73

Table, 2: Gross abnormalities in non-pregnant of Iraqi ewes.

Abnormalities	Right side No	Left side No	Bilateral No	Total No	Percent from	
					Non Pregnant Specimen n=503	Total Specimen n=660
Ovarobursal adhesion	27	11	4	42	8.35	6.36
Paraovarian Cyst	19	11	-	30	5.96	4.55
Cysticovary	5	4	-	9	1.79	1.36
Salpingitis	6	3	2	11	2.19	1.67
Occlusion of oviduct	1	1	-	2	o.39	0.30
Oviduct aplasia	-	1	0	1	0.19	0.15
Pyometra	-	-	6	6	1.19	0.91
Uterine adhesion	-	-	3	3	0.59	0.45
Uterine unicornis	-	2	-	2	0.39	0.30
Hydrometra	-	-	1	1	0.19	0.15
Tourtos cervix	-	-	-	4	0.79	0.69
Twisted cervix	-	-	-	1	0.19	0.15
Foetal maceration	-	-	3	3	0.45	0.45
Total	58	33	19	115	22.76	17.49

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دراسة عيانية لاصابات الجهاز التناسلي الانثوي للنعاج العراقية

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الخلاصة

شملت الدراسة 660 عينة من الاجهزة التناسلية لاناث الاغنام البالغة من مجازر بغداد. فحصت العينات عيانيا لتسجيل الاصابات المرضية فيها. منها 133 وبنسبة 20.22% عينة كانت تحوي على اصابة مرضية. كانت العينات التي تحوي على اجنة 157 وبنسبة 23.87% منها 18 عينة وبنسبة 11.46% عينة تحوي على اصابة مرضية. اما مجموع العينات التي لاتحوي على اجنة 503 عينة , منها 115 عينة وبنسبة 17.49% عينة تحوي على اصابة مرضية . اهم الاصابات التي سجلت كانت اعداد الالتصاقات المبيضية الجرابية 51 وبنسبة 7.72% و اعداد اكياس جنب المبايض 35 وبنسبة 5.31%. وقداستنتج من الدراسة , ان الاصابات المرضية التي سجلت في الاجهزة التناسلية الانثوية للنعاج سببت العقم المؤقت او الدائمي مما ادى الى ذبح الحيوان.

الكلمات المفتاحية: الاصابات العيانية، الاعضاء التناسلية، النعاج.