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OCCURRENCE OF PREGNANCY IN A BUFFALO-COW
WITH UTERUS UNICORNIS
(A Case Report)
(With 4 Figures)

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(Received at 24/9/1992)

حدوث الحمل في جاموسة ذات رحم بقرن واحد

أحمد زغلول

تم ذبح جاموسة تبلغ من العمر ست سنوات في أحد المجازر التابعة لمحافظة أسيوط وبعد نزع الأحشاء تم استخلاص الجهاز التناسلي كاملاً والذي تم فحصه وتبين عدم وجود القرن اليساري للرحم بينما كان القرن اليميني موجوداً ويبلغ طوله ٤٠ سم ومحيط قاعدته ١٨ سم ويوجد بداخله حميل عمره ستة أسابيع داخل الأغشية والسوائل الجنينية السليمة الخاصة به كما تبين وجود المبيضين وكان المبيض اليميني حاملاً جسماً أصفر كامل النمو، بينما كان المبيض اليساري حاملاً وصغيراً في الحجم. وبالنسبة لعنق الرحم فقد كان طوله ٩ سم ومحيطه ١٤ سم ويؤدي إلى فتحة واحدة من الداخل في اتجاه القرن اليميني بينما لا توجد فتحة في اتجاه القرن اليساري الغائب، وتم القيام بالفحص الهستولوجي للرحم وتبين وجود جميع الطبقات بصورة طبيعية.

Uterus unicornis is one of the forms of segmental aplasia of the Mullerian-derived duct system that refers to the congenital absence of one uterine horn (ACLAND, 1988 and McENTEE, 1990). Gustafsson and Holmberg (1966) found one case of uterus unicornis, affecting the right horn, in a series of 502 slaughtered ewes. ANSARI (1978) found five cases of uterus unicornis during the examination of the reproductive tracts from 3590 slaughtered ewes. The left uterine horn was affected in four animals. Moreover, SHEPPARD (1951) reported 21 cases of uterus unicornis in cats and recorded a frequency of one per 1000 animals. The present report refers to a case of 6- weeks pregnancy in a 6 years-old slaughtered buffalo-cow with uterus unicornis.

Clinical findings:

A 6 years-old buffalo-cow was slaughtered at one of the regional slaughter-houses in Assiut Governorate. After evisceration, the uterus was extracted with cervix and vagina for examination. The right ovary was containing a well-developed corpus luteum while the left ovary was present at the anterior end of the left broad ligament and containing no structures. The left horn of the uterus was completely absent (Fig 1). The right uterine horn was 40 cm long, 18 cm in circumference at its base and containing a 6 weeks-old conceptus in its intact foetal membranes and fluids. The uterine body was 4 cm in length and having one opening only toward the present horn (Fig 2). Uterine caruncles were 52 in number, arranged in 4 rows and very prominent all over the horn. The cervix was 9 cm in length, 14 cm in circumference, and provided with prominent transverse and longitudinal muscular bands. The vaginal length was 17 cm from the portio vaginalis to the level of the urethral opening.

Histological findings:

The histological examination of the uterus revealed the presence of all uterine layers with marked participation of the endometrial epithelium in placentation (Fig. 3). Uterine glands were well-developed, active in terms of secretion and abundant (Fig. 4).

Conclusion:

Animals with unilateral aplasia of the uterus may conceive, but their fertility is usually reduced. ROBERTS (1950) described 3 cases of aplasia of the distal part of the right uterine horn in 3 Guernsey cows that had calved several times. In terms of estrus cyclic activity, O'SHEA *et al.* (1974) reported normal estrus cycles in 5 ewes in which the left uterine horn was congenitally absent. They added that in all these ewes, the blood vessels supplying the left ovary were essentially normal and uterine veins drained into the left utero-ovarian vein. Normal cyclical activity in these circumstances is consistent with the mechanism of luteolysis involving countercurrent transfer of prostaglandin F₂ alpha in the uterine and ovarian vessels. Concerning the present case of pregnancy in a buffalo-cow with uterus unicornis, unfortunately previous reports on similar cases are very scarce.

ACKNOWLEDGEMENT

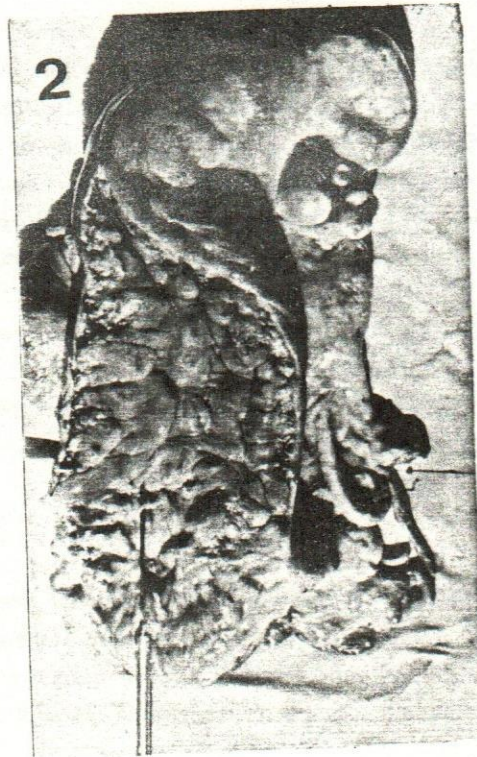
The kind help of professor A. Nafady of the Department of Veterinary Pathology, Assiut University in the histological examination, is highly appreciated.

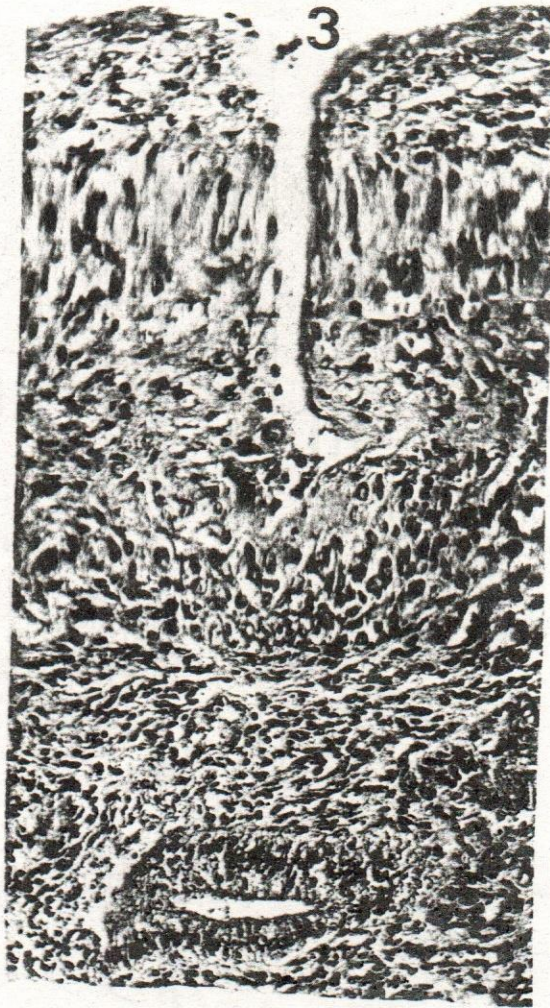
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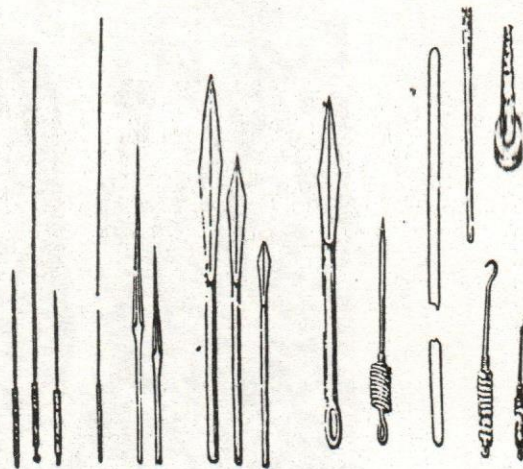
LEGENDS

- Fig. 1: Aplasia of left uterine horn with signs of pregnancy in the right horn.
- Fig. 2: Cervical opening into uterine body and lumen of the right horn only.
- Fig. 3: Participation of endometrial epith in placentation (H & E X160).
- Fig. 4: Well developed active uterine glands (H & E X160).

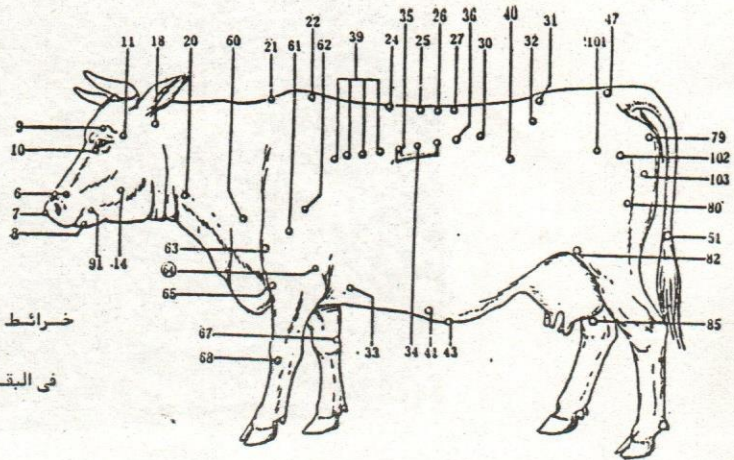




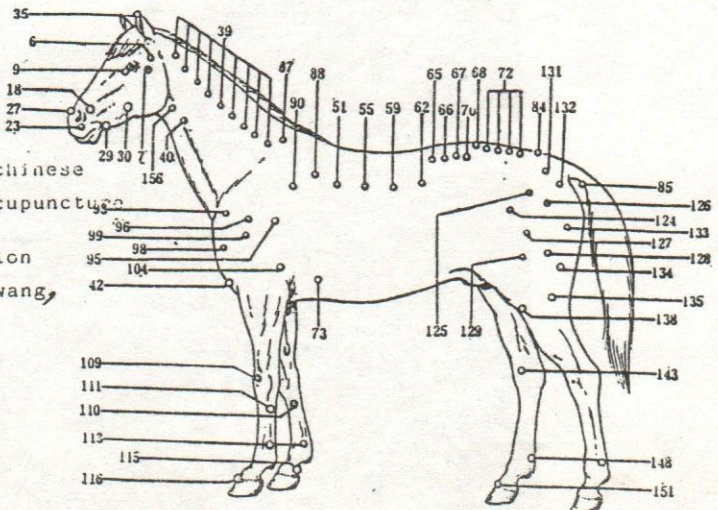
بعض الأدوات المستخدمة
في الوخز بالأبر



خرائط توزيع نقط الوخز
في البقر والخيول



منقوله من كتاب :
Handbook on chinese
veterinary Acupuncture
and Moxibustion
(Chuan and Hwang,
1990)



(شكل رقم ١)