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كلية الطب البيطرى - جامعة أسيوط
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خمول المبايض فى الأبقار والجاموس المصرى
٣ - محاولات العلاج

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استخدم فى هذا البحث ٧٧ من الابقار المصرية البلدية الحلابة وكذلك عدد ٦٩ حاموسة حلابة . هذه الحيوانات تعانى من خمول المبايض لمدة ٩٠ - ١٢٠ بعد الولادة . وقد قسمت هذه الحيوانات الى مجموعات حسب طريقة العـــلاج وكانت النتائج كالآتى :

من الحيوانات التى ظهرت عليها علامات الشبق كانت نسبة الحمل فى الأبقار ٤٢ر٨ ٪ ، ٧٠ ٪ ، ٧٧ر٧٧ ٪ ، ٦٢ر٥ ٪ ، ٥٠ ٪ ، ٥٠ ٪ باستخدام محلول اليود ، تونوفيسفان ، فوسفات الصوديوم ، برولان - أ ، سيرون - ب والكنترول على الترتيب . وكانت النسبة المقابلة للجاموس ٣٧ر٥ ٪ ، ٧٧ر٧٧ ٪ ، ٥٥ر٥ ٪ ٧٧ر٧٧ ٪ ، ٤٢ر٨ ٪ ، ٤٠ ٪ مع الترتيب .

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OVARIAN INACTIVITY AMONG EGYPTIAN COWS AND BUFFALOES
III- Trials of treatment
(With Two Tables)

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(Received at 16/12/1984)

SUMMARY

A total of 77 lactating Native cows and 69 lactating buffaloes were included in this investigation. Animals were clasified into groups according to the method of Treatment. The obtained results showed that out animals evidenced heat 42.8%, 70%, 77.77%, 62.5% and 50% of cows concieved. These animals were treated by Lugal's iodine, Tonophosphan, Anhydrus sodium phosphate, Prolan-A, Cyren-B respectively. The corressponding values in buffaloes were 37-5%, 77.77%, 55.5% and 42.8% respectively.

INTRODUCTION

Inspite of appearance of an enormus number of publications, there is still much controversy over the treatment of ovarian inactivity in cows and buffaloes. REECE (1945), MODEYSKI (1966), LAING (1970) and DINDORKAR and KAHLI (1973), in cattle and BHATTACHRYA (1954), SHALASH (1957) and MIKHAIL (1979) used stilbestrol in buffaloes. In cattle, HAFEZ (1953), ZAKI and EL-SHIRBINY (1961), ZAKI and ABDEL-AZIZ (1962), OSETROV (1963) and GLOTRA and TAYAGI (1971) used the pregant mar's serum gonadotrophin (PMSG). Moreover, LAING (1971) ROBERTS (1971) and ARTHUR (1975) reported that intra-uterine infusion of Lugol's solution usually initates a new cycle. GLOTRA et al. (1969) and MICKHAIL (1979) used Lugol's infusion for the treatment of ovarian inactivity in buffaloes.

HIGNETT (1955) OLD (1953) and DESHPANDE and SANE (1977) recomended, that addition of phosphorus preparations in the ration is essential for the higher fertility in cattle. Similar studies were performed by SCHMIDT et al. (1965) and MIKHAIL (1979) in Egyptian buffaloes. The opject of this work was to determine the effect of the different Treatments on Egyptian cows and Buffaloes reared at the Governemental farms of Assiut province.

MATERIAL and METHODS

A total of 77 lactating cows and 69 lactating buffaloes were included in this study. These animals did not show estrus signs for a period of 90-120 day after calving. Rectal examination was performed twice with 10 days interval and revealed no cyclic changes. Animals were classified into groups according to the method of Treatments:

1 - Lugol's iodine solution:
Each animal (cow or buffalo) was infused by intrauterine by 100 ml of the solution twice with a week interval (1 gm. iodine, 3 gm Pot. Iodide and 400 ml. dist. water).

2 - Tonophosphan (phosphorus):
Tonophosphan (Hoechst) was injected intra muscularly twice with a week interval (cow 20 ml, Buffalo 25 ml).

3 - Sodium phosphate anhydrous:
20 gm for cow and 30 gm for buffalo was given with the ration for 10 succesive days.

4 - Prolan-A (Follicle stimulating hormone):
Each cow was injected intramuscular by 1200 IU and each buffalo by 1500 IU of prolan-A (Byer) one time.

5 - Cyren-B (Diethyl stibestrol dipropunate):
Cows was injected intramuscular by 20 mg and buffaloes by 25 mg in divided dose for 4 or 5 successive days.

6 - Ten cows and Ten buffaloes were left without treatment as a controle.

RESULTS

The results of the different treatment in cow and buffaloes were presented in table (1) and (2).

DISCUSSION

Out of animals evidenced heat after treatment with intrauterine infusion with lugol's solution 42.8% of cows and 37.5% of buffaloes concieved simular results were obtained by FIELDEN, et al. (1973) in cattle and PROWAL et al. (1976) in buffaloes. However, NAKAKARA et al. (1971) reported a conception rate averaged 53.6% in cows. The difference may due to smaller doses used in this sutdy.

Concerning the treatment by tonophosphan, out of animals evidenced heat 70% of cows and 77.77% of buffaloes concieved. DESPHONDE and SANE (1977) reported similar results in cattle. However, MIKHAIL (1979) reported 87.7% conception rate in buffaloes.

In regard with the Treatment with anhydrous sodium phosphate as a ration additive. Out of animals showed the heat signs 77.77% of cows and 75% of buffaloes concieved. In cattle, OLDS (1953), URBANGI, (1966) and GRUNNERT and SANTIAGO (1969) recorded similar results. In Egyptian buffaloes, SCHMIDT et al. (1965) recorded 50% and MIKHAIL (1979) recorded 80% conception rate after the same Treatment.

Out of animals Treated with gonadotrophin and manifested the heat signs, 77.77% of cows and 62.5% of buffaloes concieved. These results were similar to those reported by SCITARIDS and STRAVARDIS (1976) in cows. However, TROMMER and SCHEFFLER (1970) reported a lower conception rate (51%) in cattle.

In our results conicides with those reported by HAFEZ (1953); SHOKEIR and ADWAY (1961) and ZAKI and ABDEL-AZIZ (1962) for the Treatment of anoestrus buffaloes with gonadotrophin. However, EL-WISHY (1965) obtained unsuccessful results inspite of the use of higher doses (up to 5000 IU) of PMSG in buffaloes with inactive ovaries.

As far as treatment of ovarian inactivity by stilbestrol. Only 50% of cows and 40% of buffaloes manifested the heat signs concieved. Such results were unsatisfactory in comparason with the controle groups. Similar results were reported by SHOKEIR and ADWAY (1961) and EL-WISHY (1965) in buffaloes. In cattle. Laing (1970) cited that stibestrol in a dose of 20 mg intramuscular initates normal ovarian activity. Similar results were obtained by DINKORKAR and KOHLI (1973) in cattle. However, ARAUJO et al. (1973) and FIELDEN et al. (1973) indicated that intramuscular injection of oestradiol cypionate for treatment of inactive ovaries did not increase the percentage of cows came into heat.

In buffaloes, the obtained pregnancy rate after the treatment with stilbestrol was lower that reported by SHALASH (1957) and higher than that reported by MIKHAIL (1979).

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Table (1): Response of cattle with inactive ovaries to different treatments.

Group	Treatments	Number of cases	Animals responded for treatment		
			Heat	Period	Conception
			No. %	(days)	No. %
I	Lugol's iodine	10	7(70)	10-63	3(42.8)
II	Tonophosphan injection	13	10(76.92)	10-35	7(70)
III	Anhydrous sodium phosphate	12	9(75)	5-25	7(77.77)
V	Prolan A.	12	8(66.6)	2-10	5(62.5)
VI	Gyren-B	12	12(100)	1-10	6(50)
Control.No.treatment		10	4(40)	30-60	2(50)

Table (2): Response of buffaloes with inactive ovaries to different treatments.

Group	Treatment	Number of cases	Animals responded for treatment	
			Heat	Conception
			No. %	No. %
I	Lugol's iodine	14	8(57.14)	3(37.5)
II	Tonophosphen	12	9(75)	7(77.77)
III	Anhydrous sodium phosphate	12	9(75)	5(55.5)
IV	Prolan-A	11	9(81.8)	7(77.77)
V	Cyren-B	9	7(77.7)	3(42.8)
Control	No. treatment	11	5(45.4)	2(40)