قسم الولادة
كلية الطب البيطري - جامعة أسيوط
رئيس القسم : أ.د / محمود عبد المحسن النجار

خمول المناخ في الأبقار والجاموس المصري
3 - محاولات العلاج

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استخدم في هذا البحث 77 من الأبقار المصرية البلدية الحَلَبَة وكذلك عدد 69 حَلَتة حَلَبَة. هذه الحيوانات تعاني من خمول المناخ لمدة 90 - 120 يوما بعد الولادة. وقد قسمت هذه الحيوانات إلى مجموعات حسب طريقة العلاج.

وكانت النتائج كالتالي:

من الحيوانات التي ظهرت عليها علامات الشبق كانت نسبة الحمل في الأبقار 42.8% ، 77.2% ، 0.0% 0.0% ، 52.6% ، 77% ، 50% ، 0.0% ، 77% ، 50% ، 0.0% 50% .

استخدام محلول اليود ، ميثيلين ، فوسفات الصوديوم ، بروكان - أ ، سيرون - ب والكاسترو، على الترتيب. وكانت النسبة المقابلة للجاموس 37.5% ، 77% ، 50% ، 0.0% 50% مع الترتيب.
OVARIAN INACTIVITY AMONG EGYPTIAN COWS AND BUFFALOES

III- Trials of treatment

(With Two Tables)

By
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SUMMARY

A total of 77 lactating Native cows and 69 lactating buffaloes were included in this investigation. Animals were classified 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 conceived. These animals were treated by Lugol's iodine, Tonophosphor, Anhydrus sodium phosphate, Prolan-A, Cyren-B respectively. The corresponding values in buffaloes were 37-5%, 77.77%, 55.5% and 42.8% respectively.

INTRODUCTION


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 object 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 successive 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 stilbestrol dipropionate):
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 conceived similar 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 study.

Concerning the treatment by tonophosphan, out of animals evidenced heat 70% of cows
and 77.77% of buffaloes conceived. 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 conceived. In cattle, OLDS
(1953), URBANGL (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 conceived. 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 coincides 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.

OVARIAN INACTIVITY COWS & BUFFALOES

As far as treatment of ovarian inactivity by stilbestrol. Only 50% of cows and 40% of buffaloes manifested the heat signs conceived. Such results were unsatisfactory in comparison with the control groups. Similar results were reported by SHOKEIR and ADWAY (1961) and EL-WISHY (1965) in buffaloes. In cattle, LAING (1970) cited that stilbestrol in a dose of 20 mg intramuscular initiates 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 oestriadiol 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 than that reported by SHALASH (1957) and higher than that reported by MIKHAIL (1979).

REFERENCES


EHHATTACHARYA, P. (1954): Annual reported Division of animal genetics, Indian Veterinary Research Institute, Izatnagar.


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

<table>
<thead>
<tr>
<th>Group</th>
<th>Treatments</th>
<th>Number of cases</th>
<th>Animals responded for treatment</th>
<th>Heat No.</th>
<th>Heat %</th>
<th>Period (days)</th>
<th>Conception No.</th>
<th>Conception %</th>
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<tbody>
<tr>
<td>I</td>
<td>Lugol’s iodine</td>
<td>10</td>
<td></td>
<td>7(70)</td>
<td></td>
<td>10-63</td>
<td>3(42.8)</td>
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<td>II</td>
<td>Tonophosphophan injection</td>
<td>13</td>
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<td>10(76.92)</td>
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<td>10-35</td>
<td>7(70)</td>
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<td>III</td>
<td>Anhydrous sodium phosphate</td>
<td>12</td>
<td></td>
<td>9(75)</td>
<td></td>
<td>5-25</td>
<td>7(77.77)</td>
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<tr>
<td>V</td>
<td>Frolan A.</td>
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<td></td>
<td>8(66.6)</td>
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<td>2-10</td>
<td>5(62.5)</td>
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<td>VI</td>
<td>Gyren-B</td>
<td>12</td>
<td></td>
<td>12(100)</td>
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<td>1-10</td>
<td>6(50)</td>
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<td>Control No. treatment</td>
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<td>4(40)</td>
<td>30-60</td>
<td>2(50)</td>
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Table (2): Response of buffaloes with inactive ovaries to different treatments.

<table>
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<th>Group</th>
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<th>Animals responded for treatment</th>
<th>Heat No.</th>
<th>Heat %</th>
<th>Conception No.</th>
<th>Conception %</th>
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<td>3(37.5)</td>
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<td>9(75)</td>
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<td>7(77.77)</td>
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<td>V</td>
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