CLINICAL EFFICACY OF GYNOLACTIN AND POVIDIN IN INDUCING ESTRUS IN ANESTROUS CATTLE UNDER FIELD CONDITIONS

Shiv Prasad, Suresh Kumar and S.C. Tripathi
Dept. of Gynaecology and Obstetrics,
College of Veterinary Sciences,
G.B.Pant University of Agriculture and Technology, Pantnagar-263 145, India

ABSTRACT

Thirty eight (38) anestrus cattle were included to evaluate the response of Gynolactin (mineral supplement) and povidin (0.5% iodine). Animals were divided into 5 groups viz. Group I, one bolus daily for 14 days; Group II, two boluses alternate for 7 days, Group III, one bolus daily for 14 days+10ml 0.5% povidin I/U, Group IV, 2 boluses alternate day for 7days+10ml,0.5% povidin I/U Group V, control animals. Cattle were considered responder, which had shown heat symptoms within 40-42 days of the end of the treatment, Gynolactin 2 boluses alone and along with povidin 0.5% showed better result i.e 71.42 and 62.5% animals conceived in group IV and II, respectively in comparison to other groups.

Anestrus in one of the major causes of infertility in cattle and causing greatest economic loss to the livestock owner. In our country more than 75% causes of infertility are due to nutritional deficiency followed by diseases, genetic and hormonal causes. In this experiment mineral supplement i.e. gynolactin and povidin iodine were used to induce estrus and subsequently efficacy was studied. Thirty eight anestrus cattle of about 4-5 years of age were selected at different places from tarai region of U.P. Experiment was carried out between April, 1997 to September, 1998. The animals were divided into 5 groups and subjected to different treatments. Efficacy of the treatment were studied amongst different groups after 2 months of gestation.

The animals treated with 2 boluses schedule alone or in combination took lesser time for the initiation of ovarian cyclicity (Table-I) in comparison to other groups. Madhavan and lyer(1993) also reported induction of estrus in 72.5% treated animals and 51.7% conception rate to the first insemination.Rajan et al. (1991) reported 40% conception in anestrous cows and 50% in repeat breeders to the first insemination after induction of estrus. The present results (Table-I) are comparable to the findings of Bhatt et al. (1993) who has reported 50, 90 and 20% conception after treating with 1 ml lutalyse, 1 ml lutalyse+20 ml Lugols iodine and 1 ml saline, respectively. Ehrenberg et al. (1998) have recommended use of iodine solution intrauterine in impaired fertility herds. The present study concludes that two bolus schedule with intra-uterine infusion of povidin iodine @ 10 ml is better for inducing estrus as well as early conception after parturition.

ACKNOWLEDGEMENT

Authors are thankful to M/s Jeps Pharma Pvt. Ltd., New Delhi for providing sample required for the study. Authors are also thankful to Dean, College of Veterinary Sciences and Prof. and Head (Gynaec. and Obst.), Pantnagar for providing necessary facilities.
Table 1. Time taken for the exhibition of heat after the end of treatment and pregnancy rates in various groups.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number of animals</th>
<th>Average age in years</th>
<th>Anestrous period in months</th>
<th>Time taken for exhibition of heat after end of treatment (days)</th>
<th>Pregnancy rate(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>6</td>
<td>4.63</td>
<td>7.66</td>
<td>30.33</td>
<td>50.00</td>
</tr>
<tr>
<td>Group II</td>
<td>8</td>
<td>3.80</td>
<td>5.87</td>
<td>21.66</td>
<td>62.50</td>
</tr>
<tr>
<td>Group III</td>
<td>7</td>
<td>4.94</td>
<td>6.50</td>
<td>33.00</td>
<td>42.85</td>
</tr>
<tr>
<td>Group IV</td>
<td>7</td>
<td>4.94</td>
<td>11.00</td>
<td>18.33</td>
<td>71.42</td>
</tr>
<tr>
<td>Group V</td>
<td>10</td>
<td>4.59</td>
<td>12.50</td>
<td>31.00</td>
<td>30.00</td>
</tr>
</tbody>
</table>

REFERENCES


