



Effect of Different Therapy in Repeat Breeding Syndrome in Cows

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ABSTRACT

A study was conducted on twenty repeat breeding cows to evaluate therapeutic efficacy of hormonal and non hormonal drug in treatment of repeat breeding syndrome, at Teaching Veterinary Clinical Complex, Narendra Deva University of Agriculture and Technology, Kumarganj, Faizabad. Twenty cows were divided in two groups, each group contain ten cows. The first group were treated with Busrelin 10 mcg (Gynarich 2.5 ml I/M) just after AI and second group treated with antibiotic ceftriaxone (inj. Intacef 2 gm, i/ut) 12-24 hrs post AI respectively. The pooled conception rate was 70 per cent and 80 per cent in first & second group respectively. Conception rate during treatment cycle was 50 per cent and 20 per cent in first and second group respectively. Maximum cow conceive during the treatment cycle suggesting the positive effect of GnRH in ovulation time, fertilization, corpus luteum development, progesterone secretion, survival and development of embryo hence better maternal recognition of pregnancy. Intrauterine antibiotic therapy also significantly improve conception rate in repeat breeding cows. Thus, these two treatment regimen are recommended for their judicious use to manage repeat breeding syndrome in cows.

Keyword: Cow; repeat breeding syndrome; hormones, antibiotics and artificial insemination.

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INTRODUCTION

The repeat breeding cow is one that has normal or nearly normal estrous cycles and estrous periods and has been bred two or more times to a fertile bull yet fails to conceive (Roberts 1971).

Numerous studies have shown that repeat breeding syndrome is still one of the most frustrating problem. Hence this study was conducted to evaluate the relative efficacy of hormonal and non hormonal drugs to manage repeat breeding problems in cows.

MATERIAL AND METHOD

At TVCC, NDUAT, Kumarganj Faizabad, twenty repeat breeding cows were selected that had not conceived by three consecutive services (by AI or natural service). The animals were screened for uterine infection, if any, by macroscopic examination and white side test of vaginal mucus. Cervical mucus was collected aseptically from the cows in question and equal volume of 5 % NaOH was added in same test tube. The mixture was heated up to boiling and color change intensity i.e. Turbid, light yellow, yellow and dark yellow, graded as nil, mild, moderate and severe, as per severity of uterine infection, was observed. On the basis of color change of mixture as ten animal were found positive (light yellow color change in the reaction suggestive of mild uterine infection) however in other group result was negative (turbid vaginal mucus in the test). In problematic cows Fenbendazole (Fentas 3.0 gm, PO, Intas Pharmaceuticals Ltd) was orally administered and subjected to the following treatment regimen. Group 1 (n=10) were treated with buserelin 10 mcg (Inj. Gynarich 2.5 ml I/M, Intas Pharmaceuticals Ltd) at the time of AI. However, in group 2 (n=10) antibiotic ceftriaxone (Inj. Intacef 2 gm, I/U, Intas Pharmaceuticals Ltd) 12-24 hrs post AI respectively. Pregnancy diagnosis was done by rectal palpation in non return cases 60 days post AI. In

both group, all animals were followed for three cycles post treatment and overall along with cycle wise conception rate were evaluated.

RESULT AND DISCUSSION

In group I, five animals (50 per cent) were conceived in treatment cycle and overall conception rate of three cycles was 70 per cent. The better conception rate in the treatment group is suggesting the positive effect of GnRH in ovulation time, fertilization, corpus luteum development, progesterone secretion, survival and development of embryo (Dekruif 1978) hence better maternal recognition of pregnancy. However, in group II, out of ten eight animals were conceived within three consecutive cycles. In second group the results are in accordance with Higher conception rate in repeat breeding cows treated with intrauterine drug was also reported Mahto *et al.*, 2006, Sharma and Dhama 2008 and Rajesh *et al* 2010. Thus, on the basis of current findings the conclusion can be drawn that GnRH agonist like Buserelin and intra uterine antibiotics has important bearing in management of repeat breeding syndrome in cow and judicious use of the same can be use to cope up with problem.

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