

CLINICAL MANAGEMENT OF ANOESTRUS IN HEIFERS

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ABSTRACT

After ruling out major nutritional imbalances in the feeding practices, reproductive tract anomalies and defects in management practices, six crossbred heifers above 18 months of age with minimum bodyweight of 120 kg and not yet shown proper heat signs were selected. All the heifers were given deworming drugs at the beginning of the treatment and maintained on daily ration of 2.5 kg good quality concentrate, 4 kg straw and 4 kg green grass. Advised mineral mixture (Aminomin @ 50g/day) for one month orally. Administered vitamin A, D₃, E and H (Lavitone-H 2.5ml) and Inj. GnRH (Receptal 5 ml) intramuscularly on 10th day. Advised concerned farmers to observe the heifers for heat signs. All six heifers had shown good external signs of oestrus with in a period of 30 days from the beginning of the treatment.

Keywords: Heifers, anoestrus, oestrus induction, GnRH

INTRODUCTION

The stage at which female becomes sexually mature and able to reproduce is called puberty. Oestrus is the period characterized by sexual desire and the acceptance of the male by the female and

the average duration of oestrus is 15 hours; however, there is a wide range of oestrus duration from two to 30 hours (Arthur *et al.*, 1989). Anoestrus is usually characterized by quiescent and functionless ovaries and it is a common infertility condition in the field which causes huge economic loss.

CASE HISTORY AND OBSERVATIONS

Among the animals presented for anoestrus treatment in the clinic, six crossbred heifers above the age of 18 months with minimum body weight of 120 kg were selected for adopting this treatment protocol. Heifers were selected after ruling out major nutritional imbalances in the feeding practices, anatomical defects of reproductive tract and defects in other management practices.

TREATMENT AND DISCUSSION

All the heifers were dewormed at the beginning of the treatment and were maintained on daily ration consisting of 2.5 kg good quality concentrate, 4 kg straw and 4 kg green grass. Advised mineral mixture (Aminomin @ 50g/day) for a period of one month orally, Inj. vitamin A, D₃, E and H (Lavitone-H 2.5ml) and Inj. GnRH (Receptal 5 ml) were administered intramuscularly on 10th day. Advised all concerned farmers to observe the heifers

for heat signs for the total period of 30 days from the beginning of the treatment. During the period, all the six heifers had shown good external signs of oestrus. This best result obtained could be due to the rectification of most of the causes for anoestrus in heifers. Dutta *et al.* (2001) and Mathur *et al.* (2005) reported that vitamin A and mineral mixture can be effectively used to improve the oestrus occurrence rate in bovines. Byers *et al.* (1956) reported that vitamin A deficiency has been known to delay the onset of puberty in heifers and to cause cows to give birth to weak and abnormal calves. Bulman and Lamming (1978) and Sonwane *et al.* (1994) reported that oestrus could be induced in cows by adopting treatment with GnRH.

SUMMARY

Oestrus could be effectively induced by adopting treatment protocol consisting of sufficient mineral mixture supplementation orally, vitamin A, D₃, E and H and GnRH intramuscularly in heifers which are under balanced diet and without any anatomical defects.

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