

INCIDENCE OF SUBCLINICAL ENDOMETRITIS AMONG CROSSBRED HEIFERS – A REPORT

Reproductive efficiency is a major factor affecting the profitability of dairy husbandry and is affected adversely by aberrations in oestrous cycle. Endometritis is one of the major conditions in dairy cattle adversely affecting the fertility. The causative organisms reach the uterus through vagina at coitus, insemination or parturition, although it is possible in some circumstances for infections to acquire through circulation. Endometritis influences fertility either by extending calving to conception interval via increasing the number of services per pregnancy or by producing sterility due to irreversible damage to genital tract (Arthur *et al.*, 1989).

Vahida (1992) observed an incidence of 7.95 per cent endometritis in cross-bred cattle. Pateria and Rawal (1990) described the procedure for White side test for clinical and sub clinical metritis in buffaloes and attributed the colour reaction to increase in the number of leucocytes in the uterine discharge.

In order to estimate the incidence of sub clinical endometritis in crossbred heifers, a study was conducted at Veterinary Polyclinic, Meenangadi. Sixty heifers brought for artificial insemination were screened for sub clinical endometritis using white side test (Pateria and Rawal, 1990). They were allotted into four groups depending up on the number of previous inseminations.

Group I consisted of heifers brought for first insemination,

Group II consisted of heifers brought for second insemination,

Group III consisted of heifers brought for third insemination and

Group IV consisted of heifers brought for fourth inseminations and above.

With the help of sterile pipette, the discharge was collected aseptically and was subjected to white side test as described below.

One ml of uterine discharge was mixed with one ml of five per cent sodium hydroxide solution and mixed thoroughly and heated up to the boiling point. Those samples which were negative for colour reactions were considered as normal. The test reactions were divided into three categories such as:

S – slight positive – light yellow colour

M – moderate positive – yellow colour

I – intensive positive – dark yellow colour (Pateria and Rawal, 1990).

The results obtained are presented in the Table

Table Incidence of endometritis in different groups of heifers

Group	Number of animals tested	Number of positive cases (%)
Group I	22	-
Group II	12	
Group III	9	2(22.22)
Group IV	17	6(35.30)
Overall	60	8(13.33)

Out of 60 animals examined, eight (13.33%) were found positive for subclinical endometritis. Group I and group II animals were free of sub clinical endometritis. In group III out of nine heifers, two (22.22%) showed positive colour reaction and in group

IV out of 17 heifers, six (35.3%) responded to the test. Among eight heifers which were found positive for subclinical endometritis, three showed light yellow colour with slight positive reaction, two showed yellow colour with moderate positive reaction and two with dark yellow colour with intensive positive reaction.

Summary

A study conducted to estimate the incidence of subclinical endometritis among crossbred heifers using whiteside test recorded an overall incidence of 13.33 per cent.

References

- Arthur, G.H. Noakes, D.E. and Pearson. H. 1989. *Veterinary Reproduction and Obstetrics* 6th ed. Bailleire Tindall, pp. 386-392.
- Pateria, A.K. and Rawal, C.V.S. 1990. White side test for subclinical Metritis in Buffaloes. *Indian J. Anim. Reprod.*, 11: 142-144.
- Vahida, A.M. 1992. Treatment of Endometritis for Improving Fertility in Dairy Cows. *M.V.Sc. thesis*, Kerala Agricultural University, 63 p.

Roymon Jacob¹ and Leeba Chacko²

Dept. of Veterinary Biochemistry
College of Veterinary & Animal Sciences
Mannuthy-680651, Thrissur, Kerala



¹ Teaching Assistant CoVAS., Thrissur

² Veterinary Surgeon, Veterinary Dispensary, Thariode, Wayanad