EFFECT OF INTRAUTERINE INFUSION OF CEFTIOFUR HYDROCHLORIDE ON ENDOMETRITIS IN DAIRY COWS

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Uterine infection in cows, often results in complications such as puerperal metritis, clinical endometritis, pyometra and subclinical endometritis which have detrimental effects on reproductive performance. There are many approaches for treatment postpartum endometritis, including intrauterine infusions of antibiotics or antiseptics, systemic administration of antibiotics, and hormonal therapy.

The objective of this study was to determine effects of intrauterine (i.u.) infusion of ceftiofur hydrochloride as endometritis treatment in Holstein dairy cows.

Cows which diagnosed have acute endometritis (grades 2 and 3) in 4-5 week postpartum were assigned to three treatment groups. As group 1 treated with 5 gr oxytetracyclin 10% i.u. (n=39), group 2 treated with 1 gr ceftiofur hydrochloride (Eficure, HIPRA, Spain) i.u. (n=20), group 3 treated with two dose 500µg PGF2α (Cloprostenol, estroPLAN, Agri Laboratories LTD) im 11-14 days apart (n=39). Calving to first service (DFS) and treatment to first service interval (clinical cure time) were evaluated.

There was no significant difference in DFS between cows in ceftiofur and PGF2α groups with oxytetracycline groups (70.6, 79 and 96.4 d respectively). But There was significant difference in treatment to first service interval between oxytetracycline and ceftiofur group (80.5 vs. 33.7 d, P=0.013). Also there was significant difference in treatment to first service interval between oxytetracycline and PGF2α (80.5 vs. 42.5 d, P=0.012). Therefore in ceftiofur group cure time and DFS were better than oxytetracycline and prostaglandin F2α groups.

In conclusion, intrauterine infusion of ceftiofur hydrochloride had better treatment to normal estrus/Al interval and better treatment effect on endometrium. Then ceftiofur hydrochloride infusion (i.u.) could improve cure time and DFS of cows with acute endometritis.