ABSTRACT

JULI MELIA. Ultrasonography of Endometritis Cows Reproductive Tract which Treated with a Combination of Intrauterine Infusion of Gentamicine, Flumequine and PGF$_{2\alpha}$ Analog. Under direction of AMROZI and LIGAYA ITA TUMBELAKA.

There are some factors to increase livestock population, such as an improvement of management reproduction system and minimization the existence of reproductive disorder that can lead to infertility and sterility. Therefore it will increase reproductive efficiency. One of the reproductive disorders caused by uterus pathology is endometritis which is an inflammation of the uterus endometrial lining, usually cause by an infection of bacteria especially through vagina during parturitions, parturition abnormality and at the time of assisting birth. Persistent uterine infection results in a reduction of reproductive performance by a direct deleterious effect on the uterus and disruption of normal ovarian faction. Hence, an appropriate treatment is essential component of successful reproductive management programs. Numerous treatment approaches including intrauterine infusion of antibiotics and PGF$_{2\alpha}$ have been done. The present study examines the reproductive tract ultrasonography in endometritis cow's treated with a combination of intrauterine infusion of gentamicine, flumequine and PGF$_{2\alpha}$ analog. Six endometritis cows (N=6) divided into 2 groups (each N=3). First group treated with combination of antibiotics (250 mg Gentamicine & 250 mg Flumequine) (Flugenta® 5/5, Nova Laboratories Sdn-Bhd, Sepang Malaysia) and 12.5 mg PGF$_{2\alpha}$ (Noroprost® 0.5% W/V, Norbrook Laboratories Limited, Newry) and the other group just treated with combination of antibiotics. Results of this research shows that the existence of higher level lymphocytes compared to the others leukocyte (62.50 ± 1.17; 63.66 ± 2.35), and after the treatment it shows the inexistence of a marked difference between both group of treatment (p>0.05). Ultrasound evaluation of the uterus shows no differences are found to the uterine diameter and the degradation of endometrial thickness between both group of treatment (p>0.05); however, a significant difference of CL degradation (p<0.05) is showed. Although the result also shows that the improvement of uterine diameter and the degradation of endometrial thickness occurs one day after treatment (24 hours). In summary, treatment of cow endometritis with a combination of antibiotics and PGF$_{2\alpha}$ is more effectively than combination of antibiotics alone.

Keywords: Cows, endometritis, uterus, ultrasography, antibiotics, PGF$_{2\alpha}$. 