

## OT7

### Study of the main causes of mastitis in Iran's dairy cows

F Khandan, B Qasemi-Panahi, H Daghighkia, S Alijani

*Department of Animal Science- Faculty of Agriculture- University of Tabriz- Iran*

This research was carried out to determine the status of mastitis in dairy cows and to identify management problems. Analysis of data about bulk tank and individual information of cows in two herds with 3000 cows were done. Finally, the herd status was examined for mastitis, causative bacteria, and applied management methods. The experiment performed in the years 2013 to 2017. After sorting the data, statistical analysis of such as age, number of deliveries, milk production, lactation stage, type of infection and species of bacteria was analyzed using procedure logistic regression method in SAS software. Also, for statistical analysis of variables such as SCC (*somatic cell count*), PIC (Preliminary Incubation Counts), LPC (Laboratory pasteurized count) and SPC (Standard Plate Counting), GLM procedure (General Linear Model) in SAS was used. statistical analysis showed significant correlation between SCC with SPC, PIC, and Coli Count ( $P<0.01$ ). Among the bacteria, *coagulase- negative staphylococci (CNS)*, *Streptococcus dysgalactiae*, *Streptococcus bovis*, *Other Streptococcus Species*, and *Escherichia coli* were allocated the most causes of mastitis and *Staphylococcus aureus* was found at deficient. Additionally, both environmental and contagious mastitis were seen in the studied dairy farms. There was a significant correlation between the number of parturition and lactation period length (DIM) with mastitis ( $P<0.05$ ).

## OT8

### Short-term clinical and hormonal effects of a deslorelin implant on late-prepubertal bitches

MA Karadağ<sup>1</sup>, MC Demir<sup>1</sup>, M Kuru<sup>1</sup>, S Schäfer-Somi<sup>2</sup>, S Aslan<sup>3</sup>, D Kaya<sup>1</sup>

<sup>1</sup>*Department of Obstetrics and Gynecology, Faculty of Veterinary Medicine, Kafkas University, Kars, Turkey;* <sup>2</sup>*Centre for Artificial Insemination and Embryo Transfer, Vetmeduni Vienna, Austria;* <sup>3</sup>*Department of Obstetrics and Gynecology, Faculty of Veterinary Medicine, Near East University, Nicosia, North Cyprus.*

Population control in dogs is of major interest worldwide. In prepubertal dogs, the use of GnRH agonists seems to be an alternative to surgical sterilization for contraception. However, the clinical and hormonal effects of a GnRH agonist application in the late prepubertal period have not been well investigated by now. Therefore, we determined the clinical (flare-up effect) and hormonal (serum P4 and E2) changes in bitches treated with 4.7 mg deslorelin implants (Suprelorin®, Virbac) during the late pre-pubertal period. Fifteen clinically healthy, kängal and kängal cross-breed, bitches aged  $7.5\pm 0.09$  months with a body weight of  $20.5\pm 0.86$  kg

were implanted. Estrus signs were monitored once daily, serum and vaginal cytological sampling were performed every other day for four weeks. One-third of deslorelin-treated bitches ( $n=5$ ) showed clinical proestrus  $8.8\pm 0.8$  days after implant insertion. Mean serum concentrations of P4 and E2 were  $1.53\pm 0.3$  ng/ml and  $37.7\pm 13.2$  pg/ml at the beginning of estrus. In addition to the expected cytological changes in bitches coming into estrus, a gradual increase in intermediate and superficial cell index was observed in all other, non-estrus bitches ( $n=10$ ). Our results show that treatment of late prepubertal bitches with a deslorelin implant caused changes in the cytological profile confirming an E2 increase, without, however, clinical estrus signs in 1/3 of dogs only. The mode of action of slow release GnRH agonist implants result in estrus induction and/or suppression deserves further research.

## OT9

### Effect of progesterone supplementation following TAI on pregnancy per AI in dairy cows

S.Ö Köksal, Ş.M Pancarci

*Balikesir University, Faculty of Veterinary Medicine, Department of Clinical Sciences, Division of Obstetrics and Gynecology, Balikesir, Turkey*

Lactating Holstein cows ( $n=102$ : primiparous [ $n=41$ ] and multiparous [ $n=61$ ]) were blocked by parity, and then allocated to control ( $n=51$ ) and CIDR ( $n=51$ ) groups. In both groups, timed artificial insemination (TAI) was done following Presynch-Ovsynch, and pregnancies were diagnosed with ultrasonography (USG) 32 days after TAI. Diameter (mm) of corpus luteum (CL) were determined with USG eleven days after TAI. In CIDR group, CIDR was inserted and removed four and eighteen days after TAI, respectively. The first service P/AI did not differ between control (%35,3; 18/51) and CIDR (%39,2; 20/51) groups. The first service P/AI was lower ( $P<0,05$ ) in multiparous (%22,6; 7/31) than that in primiparous (%55; 11/20) cows in control group. The first service P/AI did not differ between multiparous (%33,3; 10/30) and primiparous (%47,6; 10/21) cows in CIDR group. Diameter of CL did not differ between control ( $22.0 \pm 0.6$ ) and CIDR ( $22.7 \pm 0.6$ ) groups. Non-pregnant cows to the first AI were enrolled in Ovsynch. The second service P/AI did not differ between control (%21,2; 7/33) and CIDR (%38,7; 12/31) groups. P/AI did not differ between control (%49,0; 25/51) and CIDR (%62,8; 32/51) groups following two subsequent TAI. Following two TAI, P/AI did not differ between primiparous (%71,4; 15/21) and multiparaous (%56,7; 17/30) cows in CIDR group; whereas, P/AI was higher ( $P<0,01$ ) in primiparous (%75,0; 15/20) than that in multiparaous (%32,3; 10/31) cows in control group. Consequently, progesterone supplementation following initial TAI could increase embryonic survival in multiparous cows.