CONCENTRATION OF INSULIN-LIKE GROWTH FACTOR-I (IGF-I), LEPTIN, GROWTH HORMONE (GH), ESTRADIOL AND PROGESTERONE (P₄) IN FOLLICULAR CYSTS OF LACTATING DAIRY CATTLE

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It is believed that nutritional, physiological and pathological factors influence formation of follicular cysts in post-partum dairy cows. However, it is suspected that local factors within the follicular cyst environment have also a contribution. The role of GH, IGF-I in follicular cell function and induction of estradiol and LH receptors, respectively, as well as P₄ is reported for normal cows, but the peripheral or local role of these substances in follicular cysts remains unclear. Leptin appears to be the link between nutrition and reproduction, but is not documented in cows with follicular cysts (FC). The aims of the present study were to identify circulating and follicular protein concentrations of GH, IGF-I, estradiol, P₄ and leptin in a group of cows with follicular cysts (cases), compared to a group of normal cows (CTL). Twenty-eight postpartum (35–60 DIM) lactating Holstein cows were identified as having naturally occurring follicular cysts (cases), compared to a group of normal cows (CTL). Twenty-eight postpartum (35–60 DIM) lactating Holstein cows were identified as having naturally occurring follicular cysts and were compared to equal number of controls under the same conditions. Ultrasound, palpation and P₄ concentrations were used to select cysts. Follicular cysts (cases), compared to a group of normal cows (CTL). Twenty-eight postpartum (35–60 DIM) lactating Holstein cows were identified as having naturally occurring follicular cysts and were compared to equal number of controls under the same conditions. Ultrasound, palpation and P₄ concentrations were used to select cysts. Follicular cysts (cases), compared to a group of normal cows (CTL). Twenty-eight postpartum (35–60 DIM) lactating Holstein cows were identified as having naturally occurring follicular cysts and were compared to equal number of controls under the same conditions. Ultrasound, palpation and P₄ concentrations were used to select cysts.


THE INFLUENCE OF STAGE OF SIMULATED ESTROUS CYCLE AND THE PRESENCE OF URO-PATHOGENIC VIRULENCE FACTORS ON THE OCCURRENCE OF E. COLI INDUCED CYSTIC ENDOMETRIAL HYPERPLASIA/PYOMETRA COMPLEX IN THE BITCH

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Cystic endometrial hyperplasia/pyometra complex (CEH/P) can be induced in ovariectomised bitches during simulated diestrus by intra-uterine inoculation of Escherichia coli with five uropathogenic virulence factors (UVFs; Arora, et al. A model for cystic endometrial hyperplasia/pyometra in the bitch Theriogenology, in press). The aim of this study was to determine the influence of the presence of UVFs and the stage of cystic endometrial hyperplasia/pyometra complex (CEH/P) can be induced in ovariectomised bitches during simulated diestrus by intra-uterine inoculation of Escherichia coli with five uropathogenic virulence factors (UVFs; Arora, et al. A model for cystic endometrial hyperplasia/pyometra in the bitch Theriogenology, in press). The aim of this study was to determine the influence of the presence of UVFs and the stage of cystic endometrial hyperplasia/pyometra complex (CEH/P) can be induced in ovariectomised bitches during simulated diestrus by intra-uterine inoculation of Escherichia coli with five uropathogenic virulence factors (UVFs; Arora, et al. A model for cystic endometrial hyperplasia/pyometra in the bitch Theriogenology, in press). The aim of this study was to determine the influence of the presence of UVFs and the stage of