REVIEW OF DIAGNOSTIC SIGNS OF INVOLUTION PROBLEMS IN DAIRY COWS BY THE HELP OF CATUS DATABASE

Bettina Póth-Szebenyi[1], Henrietta Nagyné Kiszlinger[2], József Stefler[2], Sára Ágnes Nagy[3], Orsolya Varga-Balogh[2], László Kern[2], György Gábor[4]

[1]Doctoral School of Animal Science, Hungarian University of Agriculture and Life Sciences, Kaposvár, HUNGARY
[2]Institute of Animal Husbandry Sciences, Hungarian University of Agriculture and Life Sciences, Kaposvár, HUNGARY
[3]Centre for Bioinformatics, University of Veterinary Medicine, Budapest, HUNGARY
[4]Androvet Kft., Budapest, HUNGARY

*corresponding author: poth.szebenyi.bettina@gmail.com

Post-partum reproduction anomalies (increased calving interval and semen doses, pregnancy loss, infertility culling rate) are mostly caused by involution problems. The aim of this study was to find diagnostic symptoms (signs) help in identifying animals having possible subclinical endometritis. As a logical first step, analyzing a database with several thousand transrectal post-partum palpation and ultrasonic findings of the genital tract and production data of dairy cows (CATUS) seemed reasonable. Healthy (H) cows and animals with clinical endometritis (CE) both are in this database. We thought that statistical analysis of large amount of H and CE animals' data should help in identifying signs or reasonable suspicion for recognizing cows with subclinical endometritis (SCE) in the future as well. During this work palpation and ultrasound data of healthy and CE cows were compared. Totally, data of 10683 cows were evaluated by chi-square test. These results show distinct differences in distribution of uterine size (volume) and ovarian phenomena in the two groups. As a sign of inappropriate involution large-sized uterus (32.9 % vs. 64.9 %) and uterine fluid content (6.1 % vs. 31.1 %) were significantly higher ($P<0.0001$) in CE group. Abnormal ovarian ovulatory phenomena (corpus luteum /CL/ with cavity: 8.0 % vs. 13.1 %; or cystic CL: 4.2 % vs. 27.4 %) also were detected in significantly higher numbers in animals with CE signs ($P<0.0001$). These results induce further examinations to compare them with SCE animals' data for identifying diagnostic signs which are typical for the examiners.