

BONE MINERAL DENSITY OF THE OSSEOUS PELVIC FLOOR IN COWS – A PILOT STUDY

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Abstract. Utilizing 33 cows and 13 heifers age-related changes in the bone mineral density of pelvic floor and the possible bone resorption in pregnant animals were studied. Eight cows and two heifers were in the early stage of pregnancy. The pelvic floors were scanned fresh on the day of slaughtering. For the measuring of the bone mineral density of the pelvic floor the dual absorption metre (Lunar DPX-IQ) was used. Bone density was the highest in the area of the ischial bone as ossification begins in its caudal part, while bone density was the lowest in the junction of the pubic and ischial bones. Differences between pregnant and non-pregnant animals were not statistically significant. The study revealed that the bone density was higher in cows than in heifers. Evidently the hormone-driven changes in cows during early pregnancy as well during lactation only inhibit the ossification of the bony pelvic floor and do not cause the resorption of the bone tissue.

Keywords: Bone mineral density, osseous pelvic floor, bovine pelvis