HISTOPATHOLOGICAL FINDINGS IN TESTES AND QUANTITY OF THE SPERM WITHIN DIFFERENT AGE GROUPS OF CULLED BOARS

Kęstutis Mažeika[1], Albina Aniulienė[1], Alius Pockevičius[1], Neringa Sutkevičienė[2],
Eugenijus Jonaitis[3], Sigita Kerzienė[4]
[1]*Department of Infectious Diseases*
[2]*Animal Reproduction Laboratory, Department of Noninfectious Diseases*
[3]*Department of Anatomy and Physiology*
[4]*Department of Social Sciences*
Veterinary Academy of Lithuanian University of Health Sciences
Tilžės str. 18 LT-47181, Kaunas, Lithuania; Phone +370 37 36 28 81; E-mail: mazeika@lva.lt

Summary. The aim of our study was to determine histopathological changes in testes of sire boars and to evaluate their influence on the quantity of the sperm.

In the present work 47 sire boars were investigated histomorphologically after slaughter. Landrace, Large White, Pjetrens and Duroc breeds of sire boars and their crossbreds were selected for analysis.

The boars were divided into four groups (Groups 1-4) according to their age: 8-18, 18-30, 30-42 and older than 42 months. Group 1 of young boars included 14 individuals (n=14), while the other three groups (Groups 2-4) consisted of 11 boars (n=11) in each group. The study identified that the most frequent pathology was testicular degeneration, which was estimated in 78.57 % of all tested boars. Degeneration was estimated as low, medium and high degree of affection - 34.09 %, 36.36 % and 29.55 %, respectively, of all tested boars. Fibrosive testicular changes, which resulted in severe degenerative and inflammatory lesions, were diagnosed in 63.8 % of boars. In addition, pathologies such as testicular hypoplasia, calcinosis, stromal hyalinosis, sperm stasis, edema, hyperemia, an increased amount of Leydig cells were diagnosed to a low number of boars. Comparison of the four age groups of boars (Groups 1-4) proved that with age growth the boars showed significantly increased incidence of testes degeneration and fibrosis. The number of Leydig cells was also increased, whereas inflammation was detected most frequent in boars of 18-30 months of age (Group 2). It was also detected that in the case of the testicular fibrosis the volume of ejaculate was lover. In most cases of high level of fibrosis, testis weight and volume of the ejaculate were decreased.

Keywords: testes, histopathology, ejaculate, boars.