MACROANATOMICAL INVESTIGATION OF THE AORTICORENAL GANGLION IN DOMESTIC PIG (Sus scrofa domesticus) IN PERINATAL PERIOD

Joanna Klećkowska-Nawrot¹, Krzysztof Kujawa², Aleksander Chrószcz¹, Maciej Janeczek¹

Department of Animal Physiology and Biostructure, Faculty of Veterinary Medicine

University of Environmental and Life Sciences in Wrocław, Kożuchowska 1/3, 51-631 Wrocław, Poland

tel. +487 13 205 743; fax. +487 13 205 741; e-mail: lestat_v@poczta.onet.pl

The Institute for Agricultural and Forestry Environment, Polish Academy of Sciences in Poznań

Bukowska 19, 60-809 Poznań, Poland

Abstract. The macroanatomical research of the aorticorenal ganglion (ARG) was conducted on 14 domestic pigs – 4 males and 10 females of 110 days of gestation. The pigs were obtained from one uterus. The examinations were carried out using the method of macroscopic preparation with a forehead magnifying glass and binocular (magnification 2.0-5.0x). The measurements of the ARG were performed with the aid of an electronic slide-caliper to an accuracy of 0.01 mm. The measurements of studied individuals were summarized with the use of arithmetical means, standard deviation (S.D.) and coefficient of variability (C.V.). According to our study, the ARG is characterized by variable location in relation to the suprarenal gland, the renal artery, the caudal vena cava and the abdominal aorta (syntopy), the thoracic and lumbar segments of the vertebral column (skeletotopy) (between Th_{14} - L_5) and also by a different shape (triangular and elongated). A double ARG was found in two females on the left side of the body, and a triple ARG also on the left in one female near the suprarenal gland and the renal artery. The ARG size and its location in relation to the caudal end of the suprarenal gland were statistically independent of body size, length, and sex.

Keywords: aorticorenal ganglion (ARG), domestic pig, perinatal period.