

Histopathological Changes in the Testis of Hamsters with Experimentally Induced Myeloid Tumor of *Graffi*

I. Ilieva¹, R. Toshkova¹, I. Sainova¹, I. Vladov¹, E. Zvetkova²

¹*Institute of Experimental Morphology, Pathology and Anthropology with Museum,
Bulgarian Academy of Sciences, Sofia, Bulgaria*

²*Bulgarian Biorheological Society*

The secondary malignant tumors of the testes usually are a rare phenomenon. The presence of blood-testis barrier (BTB) is proposed as a reason about the seldom affection of the testes by metastatic developed tumor mass [1, 5, 17].

In this aspect, the current investigation is the first morphological study on testes, using experimental model of *Graffi* tumor in hamsters (GMT). The results indicate significant changes in the lumen diameter in capillaries, but also in the larger blood vessels in the testes of tumor-treated hamsters from day 25th and day 30th of the experiment, in comparison with the control. In parallel with these data, significant extension of the interstitial space between the seminiferous tubules is also established, as well as the presence of many atypical myeloid cells in the lumen of the whole blood vessels' length in the gonads of the tumor-treated animals. According to these results, the established changes in the blood vessels (in particular capillaries) and in the testicular tissue are probably caused by the developing GMT in the organism of the tumor-bearing hamsters (TBH).

Key words: Testicular metastases, blood-testis barrier, myeloid *Graffi* tumor, peritubular capillaries and intratubular blood vessels.