



**6th International Conference on Nanotechnologies and Biomedical Engineering
Proceedings of ICNBME-2023, September 20–23, 2023, Chisinau, Moldova
Volume 2: Biomedical Engineering and New Technologies for Diagnosis, Treatment, and
Rehabilitation**

Thiol-Disulfide Homeostasis in Kidney Tumors in Children

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https://doi.org/10.1007/978-3-031-42782-4_32

Abstract

Renal tumors in children occupy the 4th place, succumbing to hemoblastomas, tumors of the central nervous system and lymphomas, and constitute 5.5–7.0% of all malignant tumors in children. Emphasis on the severity of renal tumors and identification of the most appropriate means of diagnosis and treatment of children's kidney tumors. The study was conducted on a group of 11 patients, aged between 2 and 10 years, with renal tumors treated in Natalia Gheorghiu Institute of Mother and Child, National Scientific-practical center of Pediatric Surgery, urology department and IMSP Oncology Institute, oncopediatrics Department. The clinical examination attested paleness and dark shade of the integuments, asymmetry of the abdomen with enlargement in the hypochondrium and the respective flank - tumor formation with lumbar contact. Ultrasound of the urinary system indicated renal tumors in all 11 patients, being confirmed by computed tomography and magnetic-nuclear resonance. In six patients, the tumor was large and required first polychemotherapy treatment, then surgical treatment to remove the renal tumor. After a preoperative preparation with hemostatic preparations, surgical intervention was used to remove the affected kidney on the left in 10 patients. A biopsy of the left kidney tumor was performed in a child with bilateral renal tumor process. Screening of children in the risk group managed by the family doctor would allow early diagnosis in time and in detail to appreciate any pathological changes.

Keywords: kidney tumors, childhood diseases, wilms tumor, thiol-disulfide homeostasis



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