CAN WE CORRELATE TREAT THE KIDNEY CANCER WITH INTRA-OPERATIVE HEMOSTASIS?
ESTABLISHING MODEL FOR SPECIFIC HEMOSTASIS BIOMATERIALS COVERED WITH CYTOSTATICS ON A MOUSE C57B1/J KIDNEY MELANOMA

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Introduction: Nephron Sparing Surgery – gives opportunity to preserver nephrons during oncological surgery. In a
small percentage of cases is presented occur recurrence of cancer. No standards procedures for hemostatic and
oncostatic materials have been implemented for NSS. We will be assessed the usefulness of collagen biomaterials
and biomaterials obtained by electrospinning (Electrospining), selected biopolymers and nanomaterials. This idea is
the use of these dressings also covered trade oncostatic action to supply the wound after NSS.

Material and method: 20 adult C57B1/J mouses with induced kidney melanoma were used in experiment. Ethical
comities permission was obtained. 106 cells were implanted into the capsula fibrosa of the left kidney. After two
week’s we have resect a melanoma b16 tumor with surrounding margin in 10 mouses (GROUP A), and without the
surrounding margin in a last 10 mice (GROUP B). The kidney dissection praparates has been rated by histological
analyse. After resection the wounds has been bear with elecrospined and collagen biomaterials covered with
platinum compounds

Results: We have shown sizes and character of progress of the kidney melanoma in 3 times periods include the renal
status after NSS. All used in experiments biomaterials for wound dressing met their task as hemostatic materials.

Conclusion: The results of histological examination analyse shown that used in our study model of the mouse kidney
cancer is having regard to the human appropriate kidney cancer and could be used in potential studies of intra-
operative hemostasis correlated with treat of kidney cancer with new hemostatic patch covered with cytostatics.