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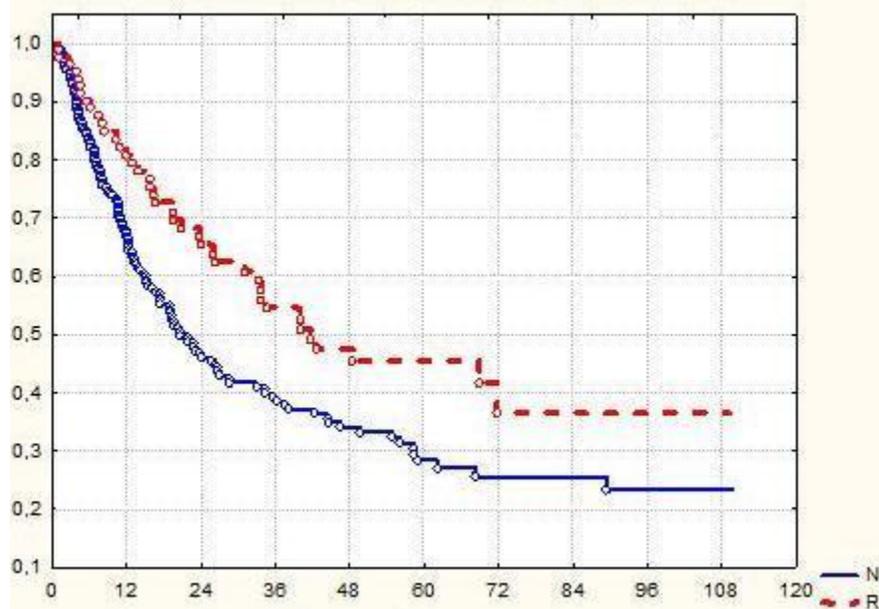
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Introduction & Objectives: Efficacy of surgical management in patients with metastatic RCC remains controversial. Cyto-reductive nephrectomy (CN) is used to decrease the number of cancer cells thus making systemic therapy more efficient, on the other hand leads to the treatment delay or will become a contraindication to its application. Thus we consider cyto-reductive partial nephrectomy (CPN) a procedure that gives a possibility to preserve parenchyma and prevent chronic kidney disease in terms of equal oncological outcomes. The aim of our study was to determine indications and efficacy of cyto-reductive partial nephrectomy in patients with mRCC.

Materials & Methods: Retrospective analysis of 1939 patients with RCC who underwent surgical treatment from 2008 to 2017 years. In 336 (17,3 %) cases, metastatic renal cell carcinoma was observed, which became the subject of this study. Cyto-reductive partial nephrectomy was done in 86 (25,6 %) cases, cyto-reductive nephrectomy – in 250 (74,4 %); with total metastasectomy in 28 (8,3 %) patients. In 48 (14,3 %) patients neoadjuvant targeted therapy for 2 months was given allowing in 33 (69 %) to proceed with CPN. After the surgery patients were given systemic therapy.

Results: The groups were equal by age, sex, IMDC risk factors, number of metastatic sites, duration of targeted therapy ($p > 0,1$). The groups differed by tumor size: $54,1 \pm 27,3$ mm vs $96,1 \pm 38,5$ mm ($p < 0,0001$) and RFPV on the affected side – $78,1 \pm 12,4$ % and $43,4 \pm 19,5$ % ($p < 0,000001$) respectively. Partial nephrectomy was done only in cases with remain functional parenchyma volume (RFPV) over 56 % and localization of the tumor at the pole 62 (72,1 %) of the kidney or laterally 24 (27,9 %).

Observation period ranged from 1 до 109 months ($26,4 \pm 25,9$). Cancer specific death was revealed in 184 (54,8%) patients: 40 (46,5%) – after CPN, 144 (57,6%) – CN. Median overall survival was significantly higher in CPN group (42,8 versus 22,6 months in CN arm). 5 year CSS was also higher in CPN group (45,9 % versus 29,1 %; $p = 0,005$). Kaplan-Meier curves are shown on Fig 1.



Conclusions: Cytoreductive partial nephrectomy is indicated in patients with mRCC and RFPV over 56% and localization of the tumor at the pole of the kidney or laterally, thus increasing rates of median OS and CSS.