37 The adverse events after neoadjuvant targeted therapy in RCC patients

European Urology Supplements 2019;18(2):e2346

Semko S. , Vitruk Y. , Voilenko O. , Pikul M. , Stakhovskyi O. , Kononenko O. , Stakhovsky E.

National Cancer Institute, Dept. of Plastic and Reconstructive Oncourology, Kyiv, Ukraine

Introduction & Objectives: Targeted therapy is an option for locally advanced and metastatic RCC, but the usage of the indicated treatment in patients with local disease in the neoadjuvant regimen is still controversial and poor studied. The basic principles of neoadjuvant targeted therapy for RCC is the concept of improving the safety of the procedure and improve outcomes. Potential advantage of using this approach is the cytoreductive effect of the indicated therapy and make possible nephron-sparing surgery to those patients who were eligible only for nephrectomy. The aim of the study was to evaluate the factors that influence adverse events rate in adjuvant and neoadjuvant regimens of targeted therapy in patients with RCC.

Materials & Methods: In a prospective cohort study, patients were divided into two groups: 1 st included 58 patients with localized RCC who received neoadjuvant therapy; in 2 nd - 53 patients with locally advanced or metastatic RCC who received adjuvant targeted therapy. Side effects were evaluated according to CTC AE 4.0.

Results: The main and control groups initially matched by sex (39/19 vs 33/20; p = 0,28, χ^2 = 0,3), age (55,8±9,2 vs 55,3±8,3 years; p =0,79), ECOG - status (0,53±0,56 vs 0,72±0,57; p = 0,8), body mass index (30,9 ± 6,1 vs 28,3 ± 4,5; p = 0,06). Groups differed according to the level of total GFR (88,6 ± 26,1 vs 61,4 ± 19,3; p ? 0,004), the number of patients with CKD (4 vs 25; p ? 0,005) and serum creatinine blood (94,5±2 vs 115±7,1; p ? 0,0026) significantly, which could affect the level of complications. With conducting TT total side effects occurred in 22 (37.9%) patients of the neoadjuvant TT group and in 32 (60.4%) of the control group (χ^2 = 5,6; p < 0,05). The groups also differed in adverse events 3-4 degree (15.5% vs. 32.1% respectively) (Table 1).

Table 1. The incidence of adverse events in comparison of groups during TT

Side effects	Group of neoadjuvant TT, n = 58	Group of adjuvant TT, n = 53	p
No side effects, n (%)	36 (62,1)	21 (39,6)	χ^2 = 5,6 p <0,05
Side effects G 1 - 4, n (%)	22 (37,9)	32 (60,4)	
Side effects G 3 – 4, n (%)	9 (15,5)	17 (32,1)	χ^2 = 3,9 p < 0,05

Conclusions: Neoadjuvant TT in patients with localized RCC allows to reduce the level of side effects from 60.4% to 37.9% compared with standard readings due to the large number functioning renal parenchyma and glomerular filtration rate (χ 2 = 5.6; p ? 0.05).