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Introduction & Objectives: Urinary tract infections (UTIs) are the most common infectious complication in kidney transplant recipients during the first year of post-transplant period. Objectives of this research was to evaluate the incidence of symptomatic UTIs and to find the risk factors.

Materials & Methods: We have analyzed the 1 year of postoperative clinical data of 220 kidney transplant recipients that had undergone kidney transplantation in 2013-2016 year at Vilnius University Hospital Santaros Klinikos.

Results: 127 (57,73%) of them were male and 93 (42,27%) were female. Overall age was 44 ± 14 years. 13 patients continued their surveillance in other clinics or died prior checking out of hospital. The incidence of symptomatic UTIs was 41,06% (n=85). 72 (84,71%) of symptomatic UTIs were diagnosed during the first month after transplantation. 55 patients had only single event of symptomatic UTI and 30 patients had 2 or more UTI episodes. In 85 patients we have identified 161 episodes of symptomatic urinary tract infections including: lower UTIs - 26,71% and upper UTIs - 71,43% from which urosepsis was counted for 24 times. First episode of UTI occurred on average after $27,02 \pm 5,76$ days.

The most common pathogens were: *Klebsiella pneumonia* (37,38%, n=80) and *E.coli* (23,36%, n=50). In this research factors that were independently associated with UTIs development were: age ($p=0,028$), total ischemic time ($p=0,038$), usage of tacrolimus ($p=0,031$), usage of Cyclosporin A ($p=0,046$), stent keeping duration ($p<0,001$) and the necessity of hemodialysis after transplantation ($p<0,001$).

Variable	Symptomatic UTI+ (41,06%) N=85	Symptomatic UTI- (58,94%) n=122	P value
Gender (m/f)	45/40 (37,82%/45,45%)	74/48 (62,18%/54,55%)	0,269
Age (yr)	46,80 \pm 13,329	42,61 \pm 13,494	0,028
Total ischemic time (hrs)	15,99 \pm 5,967	14,12 \pm 6,566	0,038
Diabetes	11 (12,94%)	15 (12,3%)	0,890
Tacrolimus	46 (54,12%)	84 (68,85%)	0,031
Basiliximab	56 (65,88%)	89 (72,95%)	0,275
CsA	38 (44,70%)	38 (31,15%)	0,046
ATG	10 (11,76%)	14 (11,48%)	0,949
Dialysis duration (months)	35,09 \pm 29,852	36,66 \pm 35,212	0,738
Re-transplantation	10 (11,76%)	19 (15,57%)	0,437

Huge immunologic risk	20 (23,53%)	30 (24,59%)	0,861
Cadaveric graft	77 (90,59%)	104 (85,25%)	0,254
Acute graft rejection	21 (24,70%)	25 (20,49%)	0,473
Stent keeping duration (d) N=200	23,33 ± 10,391	19,36 ± 4,961	<0,001
CMV infection after transplantation	6 (7,06%)	9 (7,38%)	0,931
Hemodialysis after transplantation	54 (63,23%)	43 (35,25%)	<0,001
Vesicoureteral reflux	3 (3,53%)	6 (4,92%)	0,630

UTI episodes

Amount of UTI episodes, N	Number of patients, N	Valid percent, %
1	55	64,7
2	12	14,1
3	6	7,1
4	3	3,5
5	5	5,9
6	3	1,5
9	1	3,2

Conclusions: UTIs are a common problem among kidney transplant recipients. We have identified independent risk factors for development of symptomatic infections.