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Introduction & Objectives: We investigated when a indwelling ureteral catheter should be withdrawn for infection and evaluated the importance of urinary cultures in identifying colonized microorganisms and define the bacterial flora encountered in the study. Moreover, this study tried to determine the clinical role of stent culture in clinical practice.

Materials & Methods: Between January 2016 and January 2019, a total of 90 patients who underwent ureteral stent insertion after endoscopic ureter stone treatment were included in this multi-centered study. Patients were divided into two groups and each group consisted of 45 patients. The ureteral catheters of 45 patients were taken 15 days (group 1) after the procedure and 45 were taken 30 days (group 2) after the procedure and sent to microbiological examination. Patients who had a positive urine culture before the operation were not included in the study.

Results: Demographic data of patients were similar in both groups. 3 patients in group 1 and 12 patients in group 2 had positive urine culture before catheter was taken. In group 1, 2 of 45 patients had positive catheter culture and in group 2, 6 of 45 patients had positive catheter culture.. One of the microorganisms in Group 1 was *E. fecalis* and 1 was *E.coli*. In Group 2, 2 cases were *E. fecalis*, 3 were *E.coli* and 1 was MRSE. The urine analysis of the patients before the procedure was investigated and compared with catheter culture results and no significant difference was found.

Table 1. Comparison of demographic characteristics between groups

	Group 1 (n=45)	Group 2 (n=45)	P value
M/F (%)	60/40	55.5/44.5	>0.05
Age, years, mean	45.6 (min 19 , max 73)	42.7 (min 23, max 76)	>0.05

Table 2. Bacteriology of the cultured ureteral stents

	Group 1- n (%)	Group 2 -n (%)
Enterococcus Fecalis	1(%2,2)	2(%4,4)
MRSE	0(%0)	1(%2,2)
E.coli	1(%2,2)	3(%6,6)

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Sterile	43(%95,5)	39(%86,6)
Total	45(%100)	45(%100)

Conclusions: This study is important because pre-operative urine culture does not exclude catheter colonization, and the prolonged duration of the catheter associated with greater colonization and may be associated urinary tract infection. Ureteral catheter should be removed as early as possible.