

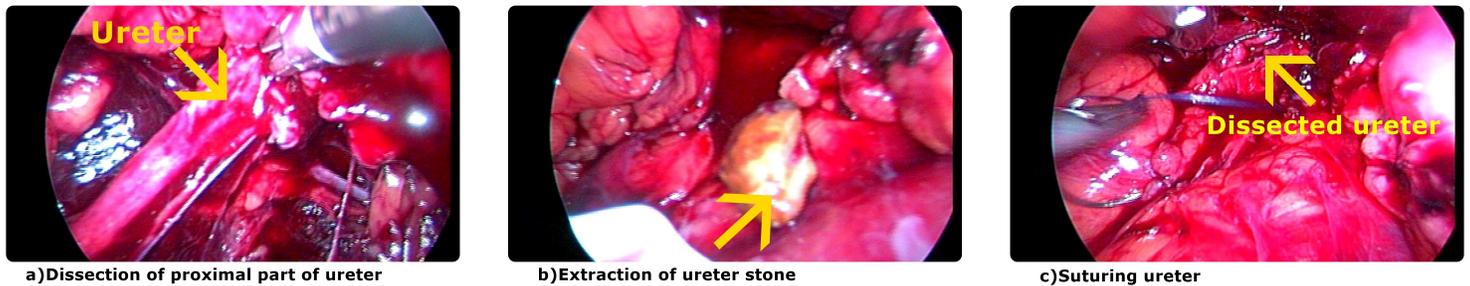
Yilmaz M., Karaaslan M., Olcucuoglu E., Uzun E., Kasap Y., Tastemur S., Tonyali S.

Health Science University Turkey Yuksek Ihtisas Research and Training Hospital, Dept. of Urology, Ankara, Turkey

Introduction & Objectives: ESWL (Extracorporeal Shock Wave Lithotripsy), rigid ureterorenoscopy (URS), open and laparoscopic ureterolithotomy are included in the treatment of ureteral stones. However, the success rate of ESWL and URS is low in complex and large stones. Laparoscopy has become an alternative to open ureterolithotomy with increased experience. In this study, we aimed to present our results of laparoscopic transperitoneal ureterolithotomy for ureteral stones.

Materials & Methods: The records of 22 patients who underwent laparoscopic ureterolithotomy performed by a single surgeon in our clinic between 2010-2016 were retrospectively reviewed, these patients were included in the study (Figure 1).

Figure 1: Laparoscopic view of ureterolithotomy



Results: Of the 22 patients, 14 were male, 8 were female. The mean age was 51.2 (27-84) and in 14 (63.6%) patients, the operation was performed on the left ureteral stone and in 8 (36.4%) patients the right side. All cases were transperitoneal and 3 ports were used. The mean stone size was 2.32 cm (1.0 -4.8) and 19 (86.4%) of the stones were proximal, 2 (9.1%) were medium, and 1 (4.5%) was in distal ureter (Table 1). The mean operation time was 105 min (60-200). Double J (DJ) stent was placed in 4 (18.2%) patients. No open procedure was performed in any patient. The mean duration of hospitalization was 5.2 days (range 3-11). No intraoperative complication was seen in any patient; complication occurred in 2 (9.1%) patients postoperatively. The stone-free ratio was 95% (21/22).

Patient no	Age (years)	Sex	Stone size (mm)	Localization (ureter)	Duration of Op.(min)	Length of stay(days)	Complication
1	84	F	22	Right-prox	60	3	-

2	46	F	15	Left-mid	75	10	Urinary leakage
3	57	F	25	Right-prox	90	4	-
4	46	M	25	Left-prox	90	8	-
5	43	M	23	Left-prox	120	4	-
6	50	M	48	Left-prox	150	4	-
7	54	M	40	Right-prox	200	8	-
8	34	M	33	Right-prox	110	4	-
9	65	M	34	Left-prox	100	4	-
10	75	M	34	Left-prox	90	4	-
11	52	F	20	Left-prox	150	11	-
12	45	M	12	Right-prox	110	4	-
13	45	M	17	Left-mid	170	6	-
14	60	M	12	Left-prox	110	3	-
15	46	M	22	Right-prox	75	4	-
16	63	F	10	Left-prox	90	4	-
17	27	M	20	Left-distal	80	4	-
18	48	F	16	Right-prox	75	4	-
19	40	F	22	Left-prox	110	5	-
20	55	M	33	Right-prox	110	9	Urinary leakage
21	44	M	12	Left-prox	75	4	-
22	49	M	16	Left-prox	80	4	-

Table 1: Demographic and perioperative data of patients

Conclusions: Laparoscopic ureterolithotomy by experienced surgeons is a safe and appropriate option in selected cases.