

SHORT-TERM URETERAL STENTING IN URETEROLITHOTRIPSY

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Abstract

The aim of our study was to evaluate for one week the ureteral stenting in patients who have undergone ureteroscopy for ureteral lithiasis.

1. INTRODUCTION

Ureteral stenting has some advantage: for ureteral obstruction is a common procedure because it can maintain his position, also it can be used in the treatment of ureteral stones under 5mm and for urinary drainage in patients who needed endoscopic or classical surgery.

2. MATERIAL AND METHODS

The study included a cohort of 140 patients with ureteral lithiasis who underwent ureteroscopy followed by ureterolithotripsy. The stone sizes were between 5-10 mm and the chemical composition of lithiasis is: oxalate dihidrat, oxalate monohidrat or uric acid. The operation was performed in rachidian anesthesia with a rigid ureteroscope STORZ 14 Ch and the stones were fragmented with a pneumatic lithotritor STORZ. After the operation we have 109 uncomplicated cases which was randomized into stented A groups 54 patients and nonstented B groups 55 patients. In A groups a 5 Ch polyurethane stent was passed through ureter after lithotripsy. Postoperatively all patients were evaluated for flank and suprapubic pain, clinical renal colic, irritative urinary symptoms, analgesic usage, urinary analysis and culture. During the operation 31 patients suffered complications: ureteral perforations (23 patients), that was successfully treated with temporary stenting for 4 weeks, or failure of lithotripsy in 8 cases which needed ureterolithotomy. Ureteral stents removal is usually performed with the cystoscope without anesthesia at women and with i.v. analgesia at man.

3. RESULTS

In the first postoperative day in group A 11 patients (20,4%) patients had flank pain while it was present in 42 patient in group B (76,4%). In group A one patient (1,9%) complicated of clinical renal colic comparing to 25 patients (22%) in group B. During hospital stay 11 patients in group A (20,4%) needed analgesic administration compared with 37 in group B (67,3%). Suprapubic pain was reported by 3 patients in group A (5,5%) compared With 7 patients in group B (13%). Ureteral irritation was also more frequently reported in patients who had stent 20 patients (A group 37%) and 3 patients (B group

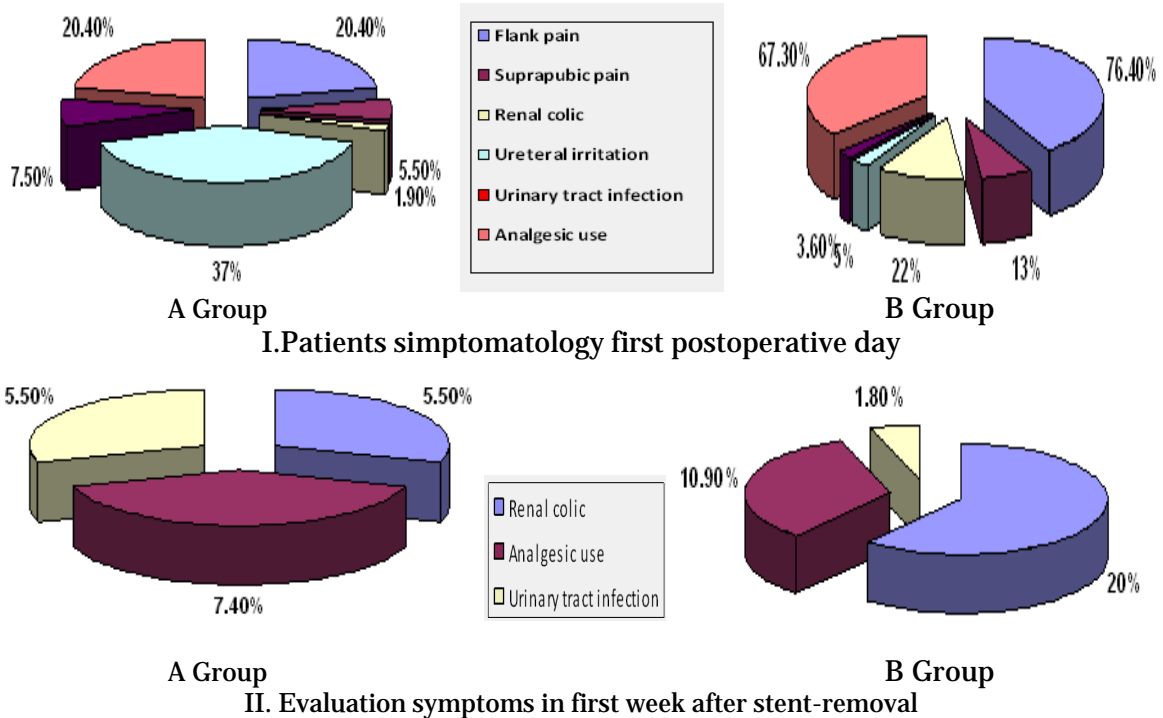
5%). Urinary tract infection was developed in 4 cases from group A (7,5%) and 2 cases from B group (3,6%). There was no difference in duration of hospitalization between both groups. In this 7 postoperative day only 3 patients in A group (5,5%) complained of renal colic comparing to 11 patients in B group (20%). No residual stone was discovered on week follow-up radiographics in both groups.

I. Patients symptomatology first postoperative day

	A group	B group
Flank pain	11 patients (20,4%)	42 patients (76,4%)
Suprapubic pain	3 patients (5,5%)	17 patients (13%)
Renal colic	1 patient (1,9)	25 patients (22%)
Ureteral irritation	20 patients (37%)	3 patients (5%)
Urinary tract infection	14 patients (7,5)	2 patients (3,6%)
Analgesic use	11 patients (20,4%)	37 patients (67,3%)

II. Evaluation symptoms in first week after stent-removal

	A group	B group
Renal colic	3 patients (5,5%)	11 patients (20%)
Analgesic use	4 patients (7,4%)	6 patients (10,9%)
Urinary tract infection	3 patients (5,5%)	1 patient (1,8%)



We have to mention the statistically significant decrease of the symptoms during a week after surgery comparing table I with table II.

4. CONCLUSION

Even if patients with stent developed urinary tract infection or ureteral irritation, ureteral stenting in uncomplicated ureteroscopy and lithotripsy has a considerable role in reducing postoperative morbidity like renal colics flank paine and analgetic usage.

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