

Ureteroscopy – First-line Treatment Alternative in Ureteral Calculi During Pregnancy?

D. Georgescu¹, R. Muțescu¹, B. Geavlete¹, P. Geavlete¹, L. Chiuțu²

¹Department of Urology, "Saint John" Emergency Hospital, Bucharest, Romania

² Department of Intensive Care, No.1 Emergency Clinical Hospital Craiova, Craiova, Romania

Abstract

Background: Urolithiasis during pregnancy is not common but remains both a diagnostic and treatment challenge. The aim of the study was to assess the ureteroscopy results as definitive treatment option in pregnant women with obstructive ureteral calculi.

Material & Methods: Between 2006 and 2012, in our clinical department, 54 pregnant women underwent active treatment for ureteral lithiasis and in 38 of these cases ureteroscopy was applied as definitive therapy. The average patients' age was 27.2 years (range 20-37 years) and the gestation period varied between 9 to 35 weeks. Flank pain was the common presenting symptom (52/54 cases), 4 women had associated fever, and 14 complained of irritative voiding symptoms. Semirigid ureteroscopy was the first choice alternative for the first 2 trimesters while flexible approach or double J indwelling were preferred for patients in the last trimester of pregnancy.

Results: Semirigid ureteroscopy allowed stone treatment in 28/32 cases. In 17 patients, calculi fragmentation using Ho:YAG laser or ballistic lithotripsy were performed, while in 11 cases, the stone was removed intact. Minor intraoperative complications were encountered in 5 patients. Postoperatively, urinary tract infection developed in 4 patients, renal colic in 2 and prolonged hematuria in one case, while 4 patients complained of stent-induced bladder irritation. Flexible ureteroscopy was successfully completed in all patients. There were no complications related to this procedure. All pregnancies were carried out to full term.

Conclusions: Ureteroscopy may be considered a safe and effective first-line definitive therapeutic option in pregnant patients requiring intervention for ureteral stone.

Key words: retrograde ureteroscopy, pregnancy, lithiasis

Corresponding author: Dragoș Georgescu, MD. PhD

Department of Urology, "Saint John" Emergency Hospital

Sos. Vitan-Bârzești 13, 75669 Bucharest, Romania

E-mail: dgeorgescu2000@yahoo.com