Effect of Alfuzosin in Preventing Double-J Stent Related Morbidity: A Prospective Randomized Study

Introduction and Objective: Ureteral stents have been an important and indispensable urologic tool. Unfortunately, studies consistently show that many patients with a stent experience stent-related symptoms, of which the most common are flank pain, voiding symptoms, infection, encrustation. In the present study we conducted a randomized controlled study to evaluate the effect of alfuzosin in improving symptoms and quality of life in patients with indwelled double-J ureteral stents using specific questionnaire.

Materials and Methods: A total of 80 patients undergoing Double-J stent placement following various urological procedures were prospectively randomized into two groups. In group I, 40 patients were enrolled, who received alfuzosin. In group II, 40 patients were enrolled and they received a placebo. Pre-operative and operative parameters were noted and compared. At follow-up to assess the stent related morbidity all patients were asked to complete validated ureteral stent symptoms questionnaires (USSQ) 3 days and 10 days after stent insertion and 1 week after stent removal. Results: The analysis of USSQ at post operative day 3 & 10 revealed significant difference in mean urinary symptoms' index, pain index score between group 1 & group 2 in favour of alfuzosin. Also patient receiving alfuzosin had their general health, work performance, quality of life better preserved. Conclusion: DJ-stent related morbidity impairs general health, work performance & QOL. Administration of selective alpha-1 blocker alfuzosin can improve a subset of stent-related urinary symptoms and quality of life effectively, and may be given in routine clinical practice.