THE MEDI-TATE TEMPORARY IMPLANTABLE NITINOL DEVICE (TIND) PROVES SAFE AND EFFECTIVE IN RELIEVING BLADDER OUTLET OBSTRUCTION (BOO) RELATED TO BENIGN PROSTATIC HYPERPLASIA (BPH)

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Introduction and objectives:
Management of BOO secondary to BPH relies upon oral drugs, which demonstrate partial effectiveness, and may induce significant side effects. Endoscopic interventions require general anesthesia, hospitalization, and post-procedure catheterization. TIND offers a fast solution that does not require general anesthesia, hospitalization or catheter. This prospective study evaluated the safety and efficacy of TIND in the management of BOO secondary to BPH.

Materials and methods:
TIND was implanted in 19 BPH-BOO patients, unsatisfactorily responsive to medication, with an international prostate symptom score (IPSS) 10, peak urinary flow (Qmax) 12 ml/sec, and prostate volume 50 cc. The device was retrieved five days thereafter, in an outpatient setting. Patients were monitored for 6-month post-implantation. This interim analysis considered the IPSS and uroflow in patients monitored for a minimum of 3 months.

Results:
Mean baseline prostate size, IPSS and Qmax were 31.8±7.2 ml, 21±5.19 and 7.58±2.43 ml/sec, respectively. Implantation and retrieval mean times were 5.8±2.9 min and 2.8±1.1 min, respectively. No complications were recorded during implantation or retrieval. One case of urinary tract infection and of temporary acute urinary retention were recorded and resolved. All patients reported significant symptomatic improvement with an 51.96±19.16% and 51.79±68.66% improvement in IPSS and Qmax, respectively, by that time point.

Conclusion:
TIND implantation is a simple and safe procedure. Considerable symptomatic improvement was obtained within three months of implantation. Longer follow-up and a larger group of patients will be required to assess the long-term impact of this novel device in BPH management.