

THE SUCCESS AND LONG-TERM DURABILITY OF SINGLE-INCISION TRANSURETHRAL INCISION OF THE BLADDER NECK (TUIBN) FOR FUNCTIONAL BLADDER NECK OBSTRUCTION

Hypothesis / aims of study

Functional bladder neck obstruction (PBNO) can cause severe lower urinary tract symptoms (LUTS), with associated misdiagnosis. TUIBN is the most effective treatment for PBNO, yet given the young age at presentation, retrograde ejaculation was of great concern. Unilateral incision was adapted to preserve antegrade ejaculation (AE). Our objective was to assess the success and long-term durability of single incision TUIBN.

Study design, materials and methods

Retrospective review of 65 men treated with single incision TUIBN for PBNO between September 1999 and January 2008 were evaluated for demographics, prostate size, American Urological Association Symptoms Score (AUASS), uroflowmetry (UF), post-void residual (PVR), and videourodynamics (UDS).

Results

Mean patient age was 43.6y (19-66). 66% used α -blocker therapy without effect. All patients had a UDS diagnosis of PBNO. 34 patients had preoperative UDS data available. Mean prostate size was 22.1g (10-40). Mean peak voiding pressure was 67.35cm H₂O (70-180). Single-incision TUIBN was performed by knife in 22% and holmium laser in 78%. Follow-up data was available for 45 men with mean follow-up of 20.5 months (0-96). Table 1 contains mean peak UF rates (Qmax), PVR and AUASS at baseline and follow-up.

Table 1 Single-incision TUIBN Results

	Mean Qmax (mL/s)	Mean PVR (mL)	Mean AUASS
Pre-operative	11.07	93.52	22.13
Post-operative	18.13	67.76	12.85
p-value	0.0119	0.3308	0.000047
24-30 months	8.90	-	16.71
48-60 months	7.35	-	19.71
p-value		0.00046	

Interpretation of results

There is a significant improvement in Qmax and AUASS in the short-term. At 24-30 months, there is a significant rise in the AUASS, correlating with a drop in Qmax. Age, method of incision, and prostate volume had no effect on outcomes. New erectile dysfunction was not reported by any men. 87% maintained AE. 7 (15.5%) patients required repeat procedures (4 double-incision TUIBN, 3 transurethral resection of prostate) for recurrent symptoms at 32.4 mo (11-65). 3 patients had interstim placement 45.3 months later for anti-cholinergic refractory urgency.

Concluding message

This is the largest series to date with follow-up of single-incision TUIBN for men with PBNO. We report short-term improvements in symptoms and preservation of AE, yet recurrence of LUTS at 2 years. Preservation of sexual function and AE are key factors in this choice of treatment. While this is a valuable short-term option for young, sexually active males, counselling on the limited durability should be discussed.

Specify source of funding or grant	n/a
Is this a clinical trial?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	No
This study did not require ethics committee approval because	This is a retrospective chart review and did not require ethics committee approval.
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes