

THE USE OF TADALAFIL TO TREAT LOWER URINARY TRACT SYMPTOMS AND ERECTILE DYSFUNCTION IN MEN WITH BENIGN PROSTATIC HYPERPLASIA: A SYSTEMATIC REVIEW

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Aim of the study

Several clinical trials have extensively investigated the efficacy and safety of chronic treatment with PDE5-inhibitors (PDE5-I), alone or in combination with alpha blockers, in ameliorating LUTS in men with or without erectile dysfunction (ED). In particular, tadalafil represents one of the most extensively investigated. The aim of present study is to perform a systematic review of the current literature concerning the use of tadalafil for the treatment of LUTS and ED in men with BPH.

Materials and methods

An wide Medline search was performed including the combination of following words: "LUTS", "BPH", "PDE5-Is", "ED", "tadalafil". No temporary limits were adopted. IIEF-5 (International Index of Erectile Function), IPSS (International Prostate Symptom Score) and Maximum urinary flow rate (Qmax) were the validated efficacy outcomes. We also evaluated the most common adverse events (AEs) reported for tadalafil in selected studies.

Results

Out of 96 retrieved articles, 87 were excluded for missing or incomplete data (baseline data, standard deviation), deficiency in methodology (several biases not included), assessment of clinical outcomes without validated instruments. Data from 9 RCTs were included in the present review, for a total of 1936 treated patients with tadalafil daily administration for a mean duration of 12 weeks. Seven RCTs reported the efficacy of daily administration of tadalafil 5mg in relieving LUTS in terms of significant IPSS reduction from a minimum of -1.60 to a maximum -4.09 (p

Discussion

Many epidemiologic evidences emphasize the close association between LUTS and ED in men with BPH. Preclinical animal models have provided a great deal of information on potential common pathogenic mechanisms underlying these two clinical identities. Although the efficacy of the most commonly used treatments for LUTS/BPH is well defined, the negative impact of these treatments on erectile function has triggered the search for new treatment options. In this regard, a new role for phosphodiesterase type 5 inhibitors in the treatment of LUTS/BPH and ED has been claimed.

Conclusions

The remarkable improvement of both LUTS/BPH and ED, and the good safety profile with tadalafil 5 mg once daily suggests a leading role of tadalafil 5 mg for men with LUTS due to BPH with or without ED.

Table 1.	IPSS		AEB	
	Robkrom #1 2005	Forst #2 2009	Robkrom #2754 2010	RANGE
TAD 5 mg	-4.90	-4.20	-4.53	20.2-26.9%
TAD 10 mg	-5.20	-4.70	-5.13	26.0-36.0%
TAD 20 mg	-5.20	-4.70	-5.17	27.3-37.1%

A PROSPECTIVE EVALUATION OF 200 PATIENTS UNDERGOING THULEP AT OUR INSTITUTION

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Aim of the study

Thulium Laser Enucleation of the Prostate (ThULEP) has been introduced as a minimally invasive treatment for benign prostatic obstruction (BPO). The objectives of the study were the evaluation of immediate outcomes and the institutional learning curve of ThULEP, and to report its complication rates.

Materials and methods

We performed a prospective evaluation of the first 200 patients undergoing ThULEP from January 2012 until April 2013 at our Institution.

Results

The average age of the patients was 67.3 years with a BMI of 25.9. Median prostate size was 75.3 cc with 42.8 of adenoma and PSA of 3.5 mg/ml. Median operation time was 1.22 hours. Median catheterization time was 1.5 days (or 34 hours), median length of hospital stay was 2.4 days. Median resected tissue weight was 28.8 g. Incidental carcinoma of the prostate was detected in 5 patients (2.5 %). Median maximum urinary flow rate (9.3 vs 21.1 ml/s) and postvoid residual urine volume (160 vs 29.8 ml) changed significantly. Early reinterventions were necessary in 1 of the patients (0.5 %) to ensure haemostasis. 13 patients (6.5 %) had a postoperative acute urinary retention to the removal of the bladder catheter and only two patients (1 %) required transfusions. The major limitations of the study are the mono-centric study design, the lack of a control group, and that only short-term data were documented on morbidity and efficacy of the ThULEP procedure.

Discussion

Thulium laser is a new surgical laser, with tunable wavelength. It may have several advantages over the other lasers, including improved spatial beam quality, more precise tissue incision, and operation in continuous-wave/pulsed modes. Thulium laser has been proved capable of rapid vaporization and coagulation of prostate tissue. These two characteristics are at the basis of the endoscopic use to enucleate obstructing prostatic tissue in a relatively bloodless manner.

Conclusions

Thulep is an effective procedures for removal of prostatic adenomas. Thulep is safe and resulted in low perioperative morbidity and may become the endourological alternative to standard TURP and open prostatectomy.