

MINIMALLY INVASIVE PROSTATIC URETHRAL LIFT (PUL) EFFICACIOUS IN A LARGE PERCENTAGE OF TURP CANDIDATES: A MULTI-CENTER GERMAN PROSPECTIVE STUDY AFTER TWO YEARS

Hypothesis / aims of study

Outcomes following prosthetic urethral lift implants (UroLift) (PUL) have been reported in a number of clinical trials. This investigation is unique because it follows the mid-term results in patients of five German centers who were treated in a normal clinical setting outside of clinical trial limitations. Previously reported studies rigorously selected subjects with mild to moderate obstruction. We report the prospective outcomes of patients treated by PUL in lieu of TURP after education concerning the less invasive therapy. The only exclusion criteria were a obstructive median lobe or high entrance into the bladder.

Study design, materials and methods

In a multicenter prospective observational study in 212 patients from five German centers were included that were implanted during the period of 10/2012 through 06/2014. All candidates, submitted for transurethral resection of the prostate (TURP), received information on PUL and were given the choice of both procedures. The only exclusion criterion was a prominent median lobe. No patients were excluded because of high post void residual (PVR), prostate volume (PV), history of retention, or oral LUTS therapy. Maximum urinary flow (Q_{max}), PVR, and the International Prostate Symptom Score (IPSS) with the Quality of Life questionnaire were assessed at baseline and 3, 6, 12, 18 and 24 months after surgery.

Results

Of the 212 candidates submitted for TURP, 85 (patient age was 38-85y) chose PUL. A total of 2-7 (3.9±1.4) implants were delivered over 42- 90m (57.0±12.0) under general or local anesthesia. 37% of our more severely obstructed patients would have been denied PUL utilizing previously reported study criteria. 96% reported immediate symptom relief; mean Q_{max}, PVR, IPSS, and QoL significantly improved (p<0.001) within the first month that were maintained or further improved within the time of follow-up. Sexual function including ejaculation was unchanged or even improved of those who reported sexual activity prior to surgery. Eleven patients (12.94%) without severe obstruction but related to their high PVR underwent retreatment: two had successful additional PUL and 9 (with PVR values of 90-280ml) underwent TURP, four of which did not significantly improve further and one remained with a suprapubic catheter.

Interpretation of results

Independent to the prospective study inclusion criteria, patients with BPO can be effectively treated by PUL. The outcome is similar to the data of other published two year follow-up with specific in- and exclusion criteria.

Concluding message

PUL is a new and promising surgical technique which may alleviate symptomatic BPH, even in severely obstructed patients. It is an easy surgical technique and has been efficacious in candidates who would have undergone, until now, TURP or another equivalent therapy, thereby demonstrating higher levels of obstruction or previous urinary retention. Within the follow-up, these patients demonstrated a similar outcome to those in published studies.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** it is not a study. It is a retrospective review of outcomes of typical patient treatment. **Helsinki:** Yes **Informed Consent:** Yes