UroLift® is associated with 6% per year surgical reintervention rate

Journal of Urology: Results from meta-analysis involving over 2,000 patients

The purpose of this document is to highlight key findings from a recent systematic literature review and meta-analysis published in the **Journal of Urology**[1] that determined the surgical reintervention rate after UroLift® procedure.

The systematic review and meta-analysis of 11 clinical studies of UroLift® encompassing 2,016 unique patients found:

- ✓ Overall annual surgical reintervention rate was 6.0% per year
- ✓ The surgical reintervention rate was 28.9% at 5 years
- ✓ 153 surgical reinterventions due to recurrent lower urinary tract symptoms (LUTS) or UroLift® implant failure were performed: TURP/laser (51.0%); Repeat UroLift® (32.7%); UroLift® explant (19.6%)
- ✓ Results were robust to various sensitivity analyses and were not significantly influenced by any single study

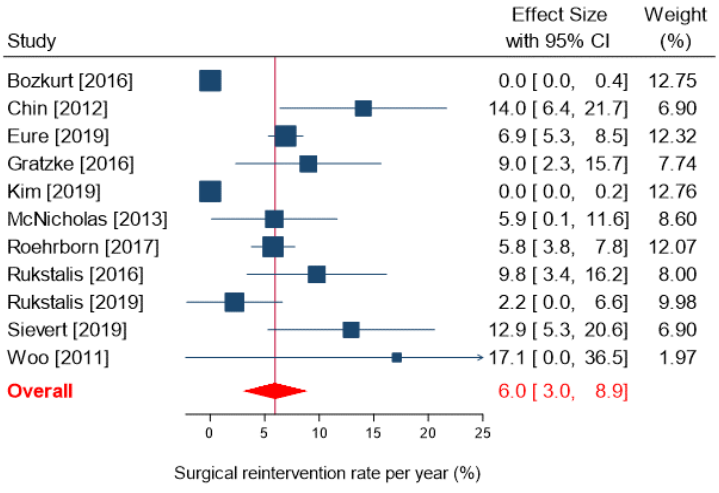
Study Synopsis

This systematic review and meta-analysis[1] identified clinical studies of UroLift® for the treatment of LUTS secondary to benign prostatic hyperplasia (BPH) with at least one year of patient follow-up.

The meta-analysis, a statistical technique to synthesize outcomes from multiple studies, was conducted according to the PRISMA guidelines.[2] **The surgical reinterventions include BPH surgical procedures, repeat UroLift® procedures, and UroLift® explant,** and were reported as annual event rates to account for variability in patient follow-up duration among different studies.

Key Findings

The total of 11 publications of PUL were included, encompassing 2,016 unique patients. The maximum duration of patient follow-up ranged from 1 to 5 years. Figure below shows the annual Surgical rates.



A total of 153 surgical reinterventions were performed in the 11 studies. The most common reinterventions were TURP/laser (51.0%), repeat UroLift® (32.7%), and UroLift® explant (19.6%). The overall surgical reintervention rate with UroLift® is 6.0%/yr.

Why are Surgical Reintervention Rates Important?

Unlike other BPH treatments, UroLift® uses a mechanical approach to insert permanent suture-based metallic implants to relieve the obstruction of the urinary tract. UroLift® patients may experience surgical reinterventions involved UroLift® explants, **a mechanism of failure that is unique to UroLift®**, resulting in the additional burdens to the patients, providers, and payers.

This analysis found that nearly 20% of UroLift® patients who required surgical reintervention underwent UroLift® explant, which is not applicable to other BPH treatments that do not require permanent implants.

Why is this Systematic Review and Meta-analysis Important?

There have been discrepancies in the surgical reintervention rates of UroLift® reported in the literature. The surgical reintervention rate in the UroLift® pivotal trial is often quoted to 2-3% per year but this rate ignores patients who were lost to follow-up or who received UroLift® explant.[3,4]

This systematic review and meta-analysis employed a transparent and state of the art scientific approach that considered both of these factors in the analysis. Since **systematic reviews with meta-analyses are considered the most robust** type of evidence,[5] this current analysis provides the most reliable surgical reintervention rate of UroLift®:

6% per year and 28.9% at 5 years.

References

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