

# Local vs General Anesthesia: A Comparative Analysis for Multi-component Penile Prosthesis Implantation.

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## Introduction

Despite good tolerability and outcome measures, local anesthesia (LA) for multi-component penile prosthesis (IPP) surgery has lost favour. We report our consecutive cohort of men undergoing penile prosthesis implantation with both local and general (GA)/spinal anesthesia looking at intra and post-operative outcomes.

## Patient and Methods

- From 1/1/10 to 6/1/11 529 consecutive patients were treated with IPP by a single surgeon, 143 with the same anesthetic team. All data points were collected prospectively for the 143 patients: 75 patients underwent implantation with LA [G1] and 68 patients had implantation under GA/spinal [G2].
- *Local Anesthesia Technique:* For complete penile blockade, the following positions were targeted using 50/50 injectable Marcaine .25%/Lidocaine 1% solution: the infrapubic incision site, pudendal nerve along the ischiocavernosus muscle, the dorsal penile nerves circumferentially and a fan block for reservoir placement. Intra-cavernosal injection as part of an artificial erection employed a 30/1 mixture of NS/lidocaine 1%. All LA was administered in less than 5 minutes. *Intravenous sedation was used sparingly when considered necessary by anesthesia and surgeon with Propofol 100mcg/kg/min and Fentanyl 100-200 mcg.*

## Outcomes

The mean age of patients was 67.2 and 66.3 for G1 and G2 respectively. Implantation in G1 was successful in all but one patient requiring conversion to GA. Immediate cardiac and neurologic toxicity were not encountered. No infections occurred. Complications included significant groin ecchymosis and urinary retention. There is no statistically significant difference for all complications by group using Fisher's exact test ( $p=0.089$ ). Only urinary retention had a statistically significant difference between the two groups: G1-0, G2-4 ( $p=0.0488$ ).

## Conclusion

IPP under LA offers comparable tolerability to GA/spinal anesthesia in our cohort of men with no additional morbidity. Also, the inherent potentially catastrophic dangers of GA/spinal anesthesia are avoided.

