



lidocaine gel? A prospective and comparative study.

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Introduction and objective

Currently, the most commonly used mode of anaesthesia for the ambulatory intra-detrusor injection of BoNTA is intra-vesical lidocaine solution, but many other cystoscopic procedures are performed under lidocaine gel, which provides good anaesthesia. We aim to assess the anaesthetic efficacy of the intra-vesical lidocaine solution compared to the intra-urethral lidocaine gel in the ambulatory injection of BoNTA.

Material and methods

Women with idiopathic overactive bladder.

Ambulatory BoNTA injection with flexible cystoscope and 4mm length and 0.4mm calibre needle

n = 45

**Group 1: intra-urethral lidocaine gel
n = 23**

Group 2: lidocaine solution (2 ampoule 10cc + 20cc saline

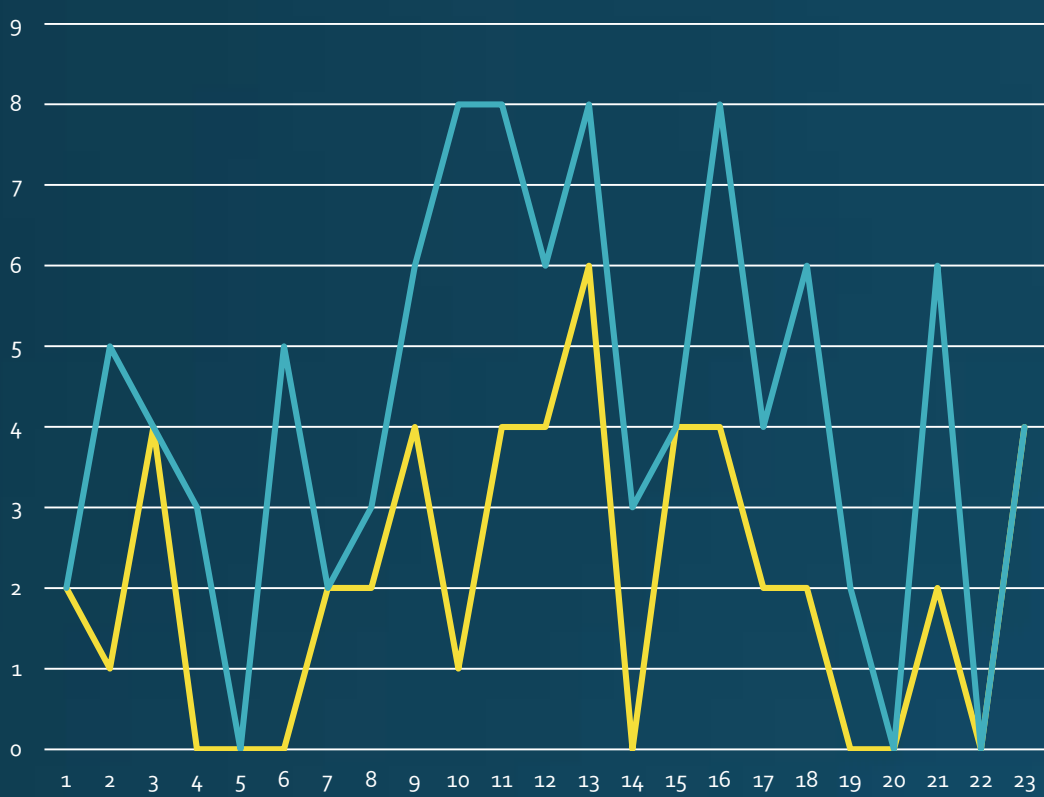
+10cc HCO₃ 8,4%)

n = 22

- **Primary outcome:**
 - VAS referred to the procedure.
 - VAS before discharge.
- **Secondary outcomes:**
 - Adverse effects attributable to the local anesthetic and the procedure itself.

Results

Figure 1. VAS at the end of the procedure

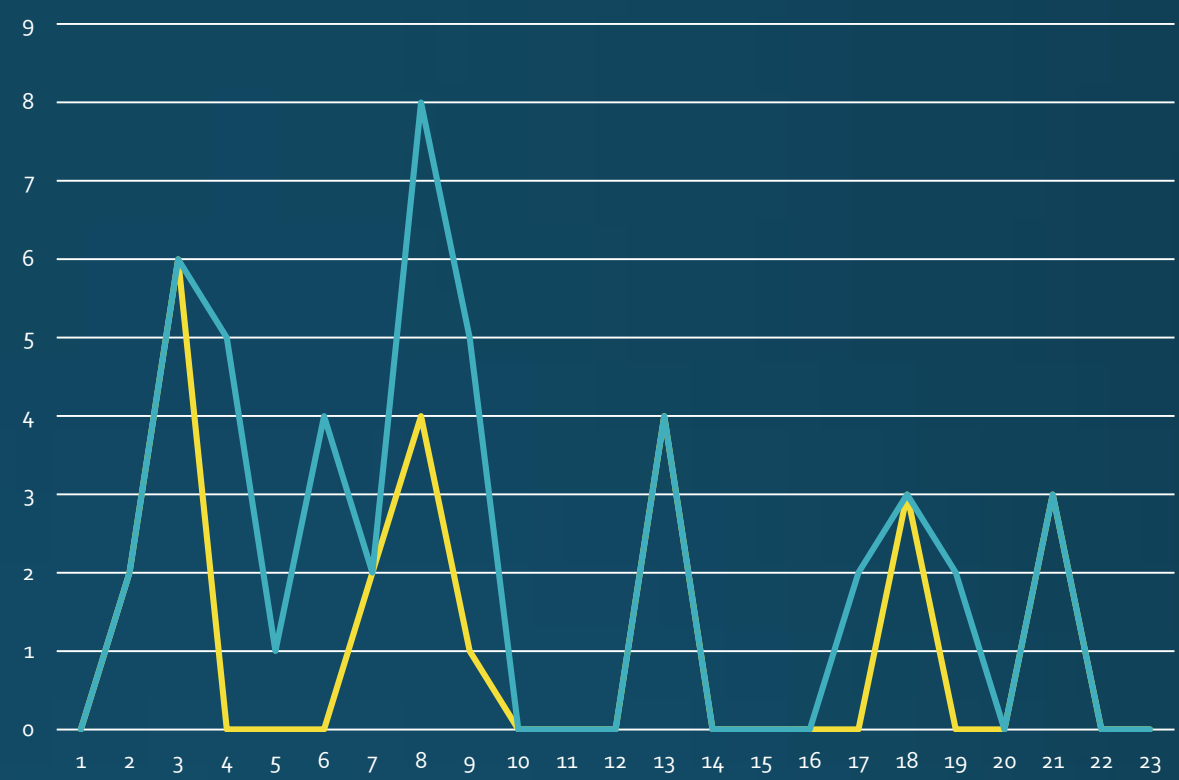


Group 1: mean 2,09, SD 1,83

Group 2: mean 2'23, SD 2

Mean VAS at the end of the procedure.

Figure 2. VAS before discharge



Group 1: median 0, interquartile range (0-2)

Group 2: median 0, interquartile range (0-2)

Mean VAS before discharge.

No statistically significant differences

Anesthetic Statistically significant differences (p<0,05)	Procedure No statistically significant differences.
Group 1: 13% Group 2: 40,9%	Group 1: 30,4% Group 2: 36,4%
Hypotension (0%)	Urinary tract infection (21,7% group 1 and 22,7% group 2)
Bradycardia (0%)	Voiding difficult (13% and 0%)
Confusion (0%)	Urinary catheter needed (4,3% and 0%)
Fatigue (0% and 18,2%)	Haematuria (13,3% and 9,1%)
Blurry vision (0%)	Table 1. Adverse effects of the procedure and the anaesthetic.
Vomits (0%)	
Dysuria (17,4% and 40,9%)	

Interpretation of results

- Avoiding systemic effects of the lidocaine solution (with a significant and clinically relevant decrease in the percentage of adverse effects in the group 1 13% vs 40,9%) and decreasing the total duration of the.
- The key points that allow us to perform the procedure with this anesthetic protocol were: 1) Changing the operating room for our Urodynamics Unit, 2) Changing the rigid cystoscope for the flexible and 3) Changing our needle for a thinner (0,4mm) and shorter (4mm) one.

Conclusions

Intra-detrusor injection of BoNTA can be performed **safety and ambulatory, with lidocaine gel as anaesthesia** without an increase of pain or complications of our patients compared to the lidocaine solution group.