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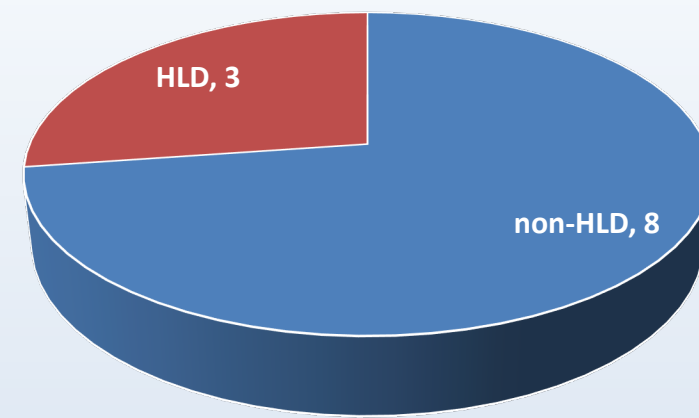
Introduction

Primary bladder pain syndrome (PBPS) consists of persistent or recurrent pain perceived in the bladder region, worsening with bladder filling and accompanied with lower urinary tract symptoms (LUTS), mainly daytime and nighttime frequency. The aim of our study is to examine a possible effect of injections of Botulinum toxin-A (BoNT/A) in the bladder wall, as an add-on treatment for women with PBPS.

Methods and Materials

This observational study recruited patients of our department in collaboration with the neuropathic pain office, with an informed consent signed. All women underwent a cystoscopy in order those with Hunner Lesion Disease (HLD) to be identified. 100iu of BoNT/A have been offered for each patient under regional anesthesia. They all have been evaluated with bladder diaries (BDs), pain Visual Analogue Scale (VAS) and International Consultation on Incontinence Questionnaire Overactive Bladder Module (ICIQ-OAB) at the baseline and 2 months after intervention. All women were under treatment for pain symptoms with amitriptyline 50mg/day and intravesical Sodium Hyaluronate for at least 6 months. Patients with a VAS score over 4 and those with ICIQ-OAB score under 4 have been excluded. Statistical analysis has been performed using SPSS v26.

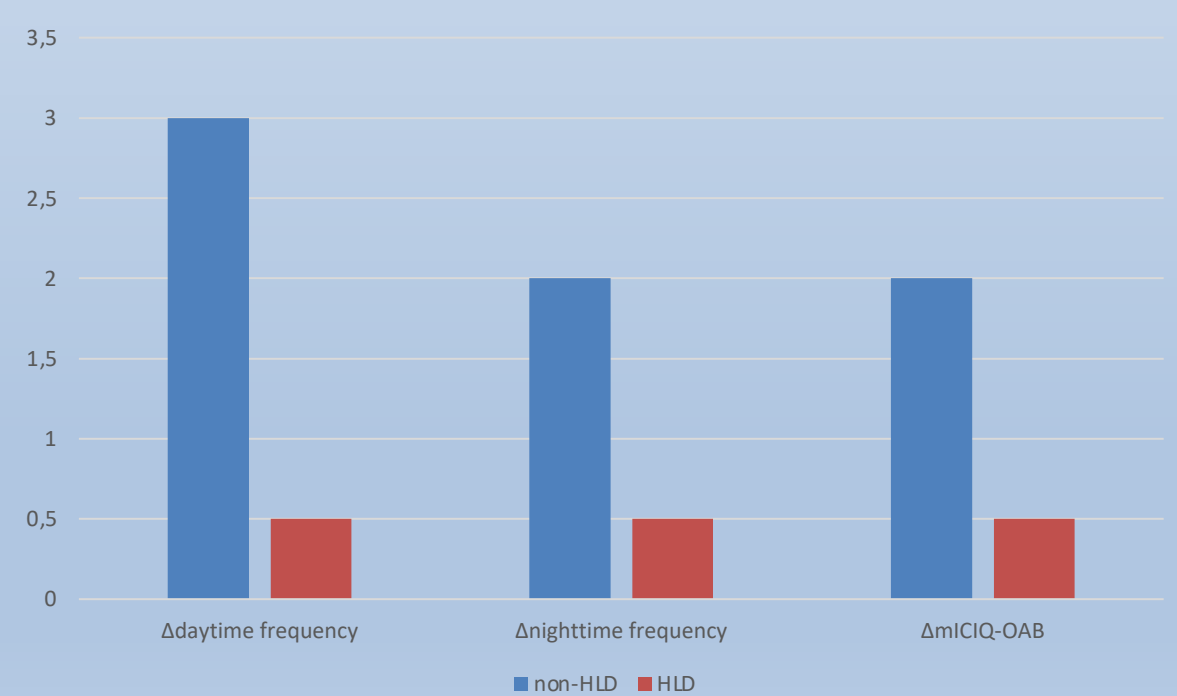
Results



	mMBC	daytime frequency	nighttime frequency	mVAS	mICIQ-OAB
baseline	125	9,5	3,5	2,5	6,5
2 months	210,5	6,5	1,5	2,6	4,5
p value	0,025	0,03	0,044	0,841	0,039

HLD patients

	mMBC	daytime frequency	nighttime frequency	mVAS	mICIQ-OAB
baseline	95	9	4	3	7,5
2 months	135	8,5	3,5	3,5	7
p value	0,135	0,94	0,831	0,847	0,661

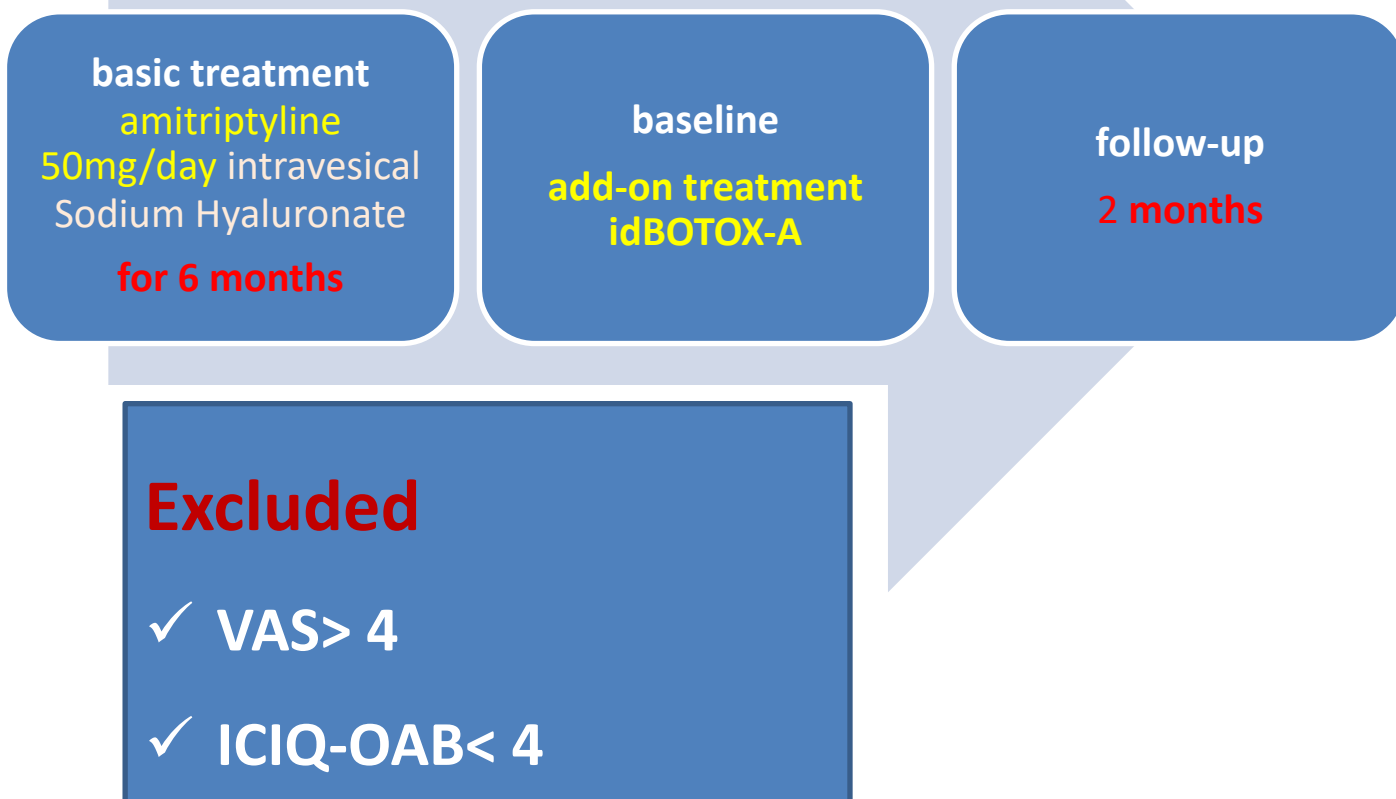
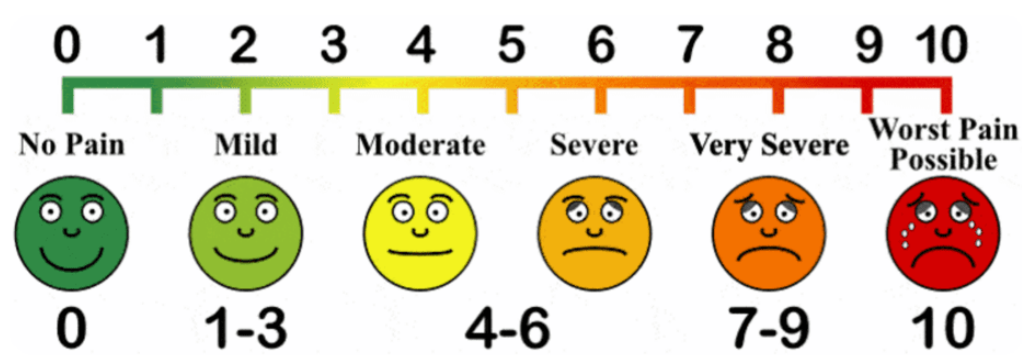


Discussion

The effect of intradetrusor injections of BoTN/A is already investigated and well proved in cases of neurogenic and idiopathic overactive bladder, although clinical trials are suggesting its use in other lower urinary tract dysfunctions too. In our study the effect of this intervention had significant statistical and clinical effect in LUTS among women with PBPS. Actually, the already achieved limitation of pain with the primary treatment, might have facilitated voiding, implying a possible placebo effect. The limitations of our study are the short number of subjects enrolled and the short-term follow-up.

Conclusions

Injections of BoTN/A in the bladder wall seem to offer a significant benefit in maximum bladder capacity and urinary frequency for women with PBPS, especially in those without HLD after a short-term follow up.



References

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- Mateu Arrom L, Gutierrez Ruiz C, Palou J, et al. Onabotulinumtoxin a injection with or without hydrodistension for treatment of bladder pain syndrome. *Int Urogynecol J.* 2021 May;32(5):1213-1219.