

BOTULINUM TOXIN A FOR THE TREATMENT OF BLADDER PAIN SYNDROME (BPS): A SYSTEMATIC REVIEW

Hypothesis / aims of study

To determine the efficacy and safety of BTX-A, compared with other interventions for the treatment of BPS to improve quality of life.

Study design, materials and methods

This systematic review fulfils all the requirements of the Cochrane manual and PRISMA reporting guidelines. The PROSPERO registration number is: CRD42016039480. Clinical trials without language discrimination were included. BPS patients over 18 y/o that were treated with BTX-A were included. Studies were searched in published databases and no published literature from inception to the present day. Risk of bias analysis was done using the Cochrane risk of bias tool.

Results

88 articles were found with the designed search strategies. After exclusions, four studies were included in the qualitative analyses. Kasyan et al 2012 compared BTX-A with hydrodistention. Manning et al 2014 compared the injection of BTX-A with the injection of normal saline in previously hydrodistended bladders. In both cases, primary end point was measured by the O'Leary-Sant questionnaire score (OLS). El-Bahnasy et al 2009 compared BTX-A with BCG administration, through Global Response Assessment. Kuo et al 2015 compared hydrodistention plus suburothelial injections of BTX-A with hydrodistention plus normal saline injections. Reduction in pain was measured through VAS bladder pain score.

Interpretation of results

A similar efficacy to their controls had been found in Kasyan and Manning studies. El-Bahnasy had found improvement in BTX-A in all parameters. Kuo et al. 2015, found a significantly reduction in pain in the BTX-A group. Regarding the risk of bias, three studies did not have adequate descriptions of selection, performance, and detection bias. The study of Manning had low risk of selection, attrition, and reporting bias.

Concluding message

There is not enough evidence to conclude the efficacy of BTX-A for the treatment of interstitial cystitis to improve quality of life.

References

4. Kuo H-C, Jiang Y-H, Tsai Y-C, Kuo Y-C. Intravesical Botulinum Toxin-A Injections Reduce Bladder Pain of Interstitial Cystitis/bladder Pain Syndrome Refractory to Conventional Treatment - A Prospective, Multicenter, Randomized, Double-Blind, Placebo-Controlled Clinical Trial: Intravesical BoNT-. *Neurourol Urodyn.* 2015;35:609–14.
- El-Bahnasy A, Farhat Y, Bendari M, Taha M, Bahnasy A, Damhougy. A randomized controlled trial of bacillus calmette-guerin and botulinum toxin-A for the treatment of refractory interstitial cystitis. *UIJ.* 2009;2(1).
- Manning J, Dwyer P, Rosamilia A, Colyvas K, Murray C, Fitzgerald E. A multicentre, prospective, randomised, double-blind study to measure the treatment effectiveness of abobotulinum A (AboBTXA) among women with refractory interstitial cystitis/bladder pain syndrome. *Int Urogynecol J.* 2014;25(5):39.

Disclosures

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