EXPERIENCE OF ENDOVESICAL HYALURONIC ACID IN THE TREATMENT OF INTERSTITIAL CYSTITIS/PAINFUL BLADDER SYNDROME

Hypothesis / aims of study
To evaluate the effectiveness of endovesical hyaluronic acid in the treatment of Interstitial Cystitis/Painful Bladder Syndrome (IC/PBS).

Study design, materials and methods
A total of 11 women with a mean age of 44 years old (29-60) with IC/PBS diagnosis refractory to medical treatment were included in the study. The mean follow up was 9.7 months (6-16).
The IC/PBS diagnosis was based on the patient’s symptoms, dismissing other possible bladder pathologies. A cystoscopy under general anaesthesia with hydrodistention was performed in every patient. They all completed the visual analogue scale (VAS) questionnaire (0=no pain-10=highest intensity) and a micturition time chart.
All patients included in this study had multiple previous treatments, such as Non-Steroidal Anti-Inflammatory Drugs, Pentosan Polysulfate, Amitriptiline, Dymethyl Sulfoxide (DMSO), Botulinum toxin, Anticholinergics and Hidroxyzine, without any clinical improvement.
Patients were administered 40 mg of hyaluronic acid in 50 mL of saline, intravesically, once a week for 4 weeks and then once a month for 6 months.
The primary endpoints of the study were pelvic pain, increased daytime frequency and nocturia.
We defined Treatment Global Response as:
Complete Response: Asymptomatic patient (VAS=0), daytime frequency of 8 or less, nocturia 2 or less.
Partial Response: Mild pelvic pain (VAS=1-3), Improvement in 2 of 3 endpoints.
No Response: Moderate to intense pelvic pain (VAS=4-10) without improvement of daytime frequency or nocturia.

Results
Normal cystoscopy was observed in all patients after the 6 months of treatment.
After the third endovesical administration (week 3), 100% (11) of the patients showed an improvement of pelvic pain, which was maintained in 54.5% of patients (6) until the end of the follow-up, in 36.4% (4) there was a minor degree pelvic pain recurrence during the period of follow-up, and in 1 (9%) patient there was a complete symptom recurrence at the end of the study.
Regarding the increased daytime frequency, the average number of voidings was reduced after the 6 months treatment period, from 13.4 (10-20) daily voidings to 6.4 (5-11).
After 6 months of treatment, nocturia was improved, with a significant reduction, from 6.5 (4-12) to 2.3 (1-6).
Treatment Global response was 54.5% (6) with complete response, 36.4% (4) with partial response and 9% (1) with no response at the end of the follow-up.
No adverse effects were notified.

Interpretation of results
In this study we found a positive response to the treatment (54.5% of complete response).
There was a therapeutic success evaluated as the improvement of the three primary endpoints: pelvic pain, increased daytime frequency and nocturia.
The follow-up showed a very good patient evolution, considering a positive response to the treatment (54.5% of complete response and 36.4% of partial response at month 6) and the absence of adverse effects.
In relation to the treatment duration, we found that a weekly administration for 4 weeks and then a monthly administration for 6 months showed to be an acceptable administration scheme with significant symptoms improvement.
We think that a chronic maintenance therapy should be considered in future studies with longer follow-ups, as well as if it should be on a weekly or monthly basis.

Concluding message
In our experience, endovesical hyaluronic acid appears to be safe and efficient in the treatment of IC/PBS.

Disclosures
Funding: NONE Clinical Trial: No Subjects: HUMAN Ethics not Req’d: It is a retrospective study, based on results of treatment with an approved drug in Argentina, where the study takes place. Helsinki: Yes Informed Consent: Yes