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EDITORIAL COMMENT

Overactive bladder syndrome (OAB) represents a disease which drastically reduces the quality of life of the affected patients. It has an incidence of 11%-16% in the adult population and its prevalence increases with age.[1,2] OAB presents a multifactorial etiology, which includes changes in anatomy and body composition, lifestyle factors, and comorbidities.

Initial management consists of behavioral therapy. This includes bladder training, pelvic floor muscle training, and fluid management. Next, treatment for OAB consists of pharmacologic therapy. Antimuscarinics are widely used, although they are frequently discontinued due to low efficacy and bothersome side effects. Furthermore, long-term efficacy and tolerability (>5 year) of this drug still need to be evaluated.[3]

When conservative therapies are insufficient, several minimally invasive surgical procedures can be proposed for the therapy of refractory OAB. One of these therapies includes intravesical botulinum toxin type A (BTX-A), which can provide a safe and effective medium-term management option with a success rate of 60%-80%.[3]

Nevertheless, clean intermittent self-catheterization (CISC)-related issues represent one of the most common reasons cited for stopping treatment with a rate of 6%-45% and a risk for UTI of 05-45%.[4]

When comparing intravesical BTX-A to other minimally invasive surgical procedures such as posterior tibial nerve stimulation and sacral neuromodulation, none of these therapeutic modalities shows strong superiority over another. The treatment algorithm is dependent on several factors, including age, comorbidity, patient preference, surgical expertise, and financial concerns. All these factors should be taken into consideration before initiation of treatment.[3]

In this study, the authors sought to identify any factors which can be used to predict poor response to BTX-A injections and adverse events (voiding dysfunction necessitating CISC and UTIs) as well as they aimed to identify a link between adverse events and poor response.[5] Overall, 74 patients underwent injection of BTX-A for the first time. Twenty-one patients were treated with 100 U and 53 were treated with 200 U. Adverse outcomes such as symptomatic urinary retention of >150 mL requiring CISC occurred in 32 (43.8%) and UTI in 25 (34.2%). At multivariate analysis, the only predictor of poor response was male gender (OR, 5.45; 95% CI 1.83-16.47; $P = .002$). Interestingly, lower dose of 100 U did not significantly predict a poorer response on univariate analysis (OR, 2.66; CI= 0.92-7.69; $P = .072$).

Furthermore, the study could also suggest that the only factors found to be statistically significant at predicting UTIs on multivariate analysis were CISC and lower PIP1 in females.

The conclusions of this study, that male gender is a potential predictor of poor response to BTX-A injections as well as the need for CISC and that lower Qmax is a potential risk factor for voiding dysfunction necessitating CISC, represent an important clinical aspect in terms of patient selection but also when counselling patients for the procedure.

Based on the reported results, alternative minimally invasive surgeries such as posterior tibial nerve stimulation and sacral neuromodulation could be privileged to BTX-A in men affected by OA.

Moreover, another question arises and it deals with the necessity of a new consensus in the search of an appropriate regimen for antibiotic prophylaxis in patients who need CISC.

A multidisciplinary approach, including urologists, neurologists, and infectivologists, should show us in the next future the best clinical way to recommend to our patients.

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