Intravesical OnabotulinumtoxinA Injections for Refractory Painful Bladder Syndrome

Introduction and Objective: Bladder pain associated with interstitial cystitis and painful bladder syndrome (IC/PBS) is frequently excruciating and intractable. The use of onabotulinumtoxinA (BoNT-A) for relief of this type of bladder pain has not been well described. The objective is to evaluate efficacy and safety of intravesical BoNT-A injection in treatment of IC/PBS refractory to conventional treatment.
Materials and Methods: Sixty-seven patients with characteristic IC/PBS were enrolled. Intervention: Intravesical injection of 100U of BoNT-A immediately followed by cystoscopic hydrodistention under intravenous general anesthesia. Changes of the urodynamic parameters, O'Leary-Sant symptom indexes (ICSI) and problem indexes (ICPI), visual analogue score (VAS) for pain, functional bladder capacity, and global response assessment (GRA) were evaluated at baseline and 6 months after BoNT-A injection. Adverse events that occurred after this procedure were also assessed.
Results: The ICSI and ICPI total score (23.6 ± 5.9 v 15.2 ± 8.5, p=0.000), VAS (5.3 ± 2.2 v 3.3 ± 2.4, p=0.000), functional bladder capacity (137.6 ± 77.6 v 178.5 ± 78.2) and GRA (0.3 ± 0.8 v 1.41 ± 1.0, p=0.000) all showed significant improvement after intravesical injection of 100U of BoNT-A. Limitations: This study lacks a placebo control group so the placebo effect cannot be eliminated and does not provide information of the efficacy of this treatment after 6 months.
Conclusion: Intravesical onabotulinumtoxinA injection appears to be a safe and effective therapeutic option for analgesia and increased bladder capacity of patients with IC/PBS.