RESULTS

Overall, good outcomes were reported in 36 (60%) patients of DU. The treatment outcome was significantly better in patients with non-neurogenic DU than neurogenic DU (74.1% vs 48.5%, p = 0.039) (Table 1). However, a good treatment outcome was not related to age, gender, or any videourodynamic variables except for the condition of bladder neck during voiding (the rate of good outcome, open 94.3% vs tight 12.0%, p < 0.0001). In the patients who had good treatment outcome after onabotulinumtoxinA treatment, the IPSS, Qmax, voided volume and PVR all improved in neurogenic or non-neurogenic DU (Table 2). However, the changes of measured parameters from baseline to post-treatment between groups showed no significant difference. A total of 12 patients (20%) reported de novo urinary incontinence after urethral onabotulinumtoxinA injection, including 4 developed stress urinary incontinence and 8 had exacerbated urgency urinary incontinence.

INTRODUCTION & OBJECTIVES

Although onabotulinumtoxinA urethral sphincter injection seems effective in treating voiding dysfunction due to detrusor underactivity (DU), not all patients have successful treatment results. Therefore, this study analyzed the treatment outcomes and identify videourodynamic predictive factors for successful outcome in patients with neurogenic and non-neurogenic DU.

MATERIALS AND METHODS

A total of 60 patients including 27 with non-neurogenic and 33 with genetic DU were treated with injections of total 100U of onabotulinumtoxinA into the urethral sphincter. Treatment outcomes were assessed 1 month after treatment using the Global Response Assessment. The treatment outcome was analyzed by the baseline videourodynamic characteristics.

CONCLUSION

OnabotulinumtoxinA urethral sphincter injection is effective in 60% of patients with voiding dysfunction due to neurogenic or non-neurogenic DU. Careful videourodynamic interpretation of bladder neck opening enables urologists to select appropriate candidates for onabotulinumtoxinA treatment.

Disclosures Statement: The authors declare no conflicts of interest.