

EVALUATION OF THE EFFECTIVENESS OF BOTULINUM TOXIN TYPE A IN THE COMPLEX APPROACH TO TREATMENT IN PATIENTS WITH CERVICAL DYSTONIA

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INTRODUCTION:

Botulinum toxin type A (BTA) is a well-known and NIH-recommended treatment for a variety of dystonias (Neurotherapeutics. 2014 Jan; 11(1): 139–152, doi: 10.1007/s13311-013-0231-41). The complex approach to patients with dystonia, which can include psychotherapy as well as a number of physical therapies, is considered to prolong the gap between BTA injections, but those combinations of treatment methods have not been investigated thoroughly.

METHODS

In a case-control study in small groups, we compared the effectiveness of single injections of BTA (group I, n=24) with a complex approach (single injection of BTA accompanied by psychotherapy, physical therapy, postisometric relaxation; group II, n=18). Treatments were assessed before treatment and 2 weeks and 4 months later. The assessment was conducted in patients ages 37 to 75 years with cervical dystonia/torticollis spastica. Questionnaires used included the 36-item Health Survey (SF-36 scale), Visual Analog Scale (VASc), and Toronto Spasmodic Torticollis Rating Scale (TWSTRS).

RESULT

At the enrollment period and 2 weeks after, both groups were comparable on all scales and subscale points. After 4 months, there were positive results in both groups, but only patients in group II demonstrated a significant change in all quality of life subscales of the SF-36 (for example, role-emotion subscale before treatment, 3.61 ± 0.33 vs 6 ± 0.33 at 4 months after BTA+rehabilitation complex, $P < 0.05$; general health subscale, 16.61 ± 2.17 vs 13.22 ± 0.33 , [$P < 0.05$]); and TWSTRS, 51.75 ± 9.83 vs 27 ± 4.33 , $P < 0.02$ and reduction of pain by VASc, 5.94 ± 0.83 vs 1.55 ± 0.16 , $P < 0.005$).



CONCLUSIONS

The effectiveness of BTA methods depends on the manual skill of the injector and the need to improve constantly. However, the complex approach in dystonia treatment could be introduced in routine practice to extend the interval between injections, increase quality-of-life parameters, and reduce the financial burden of the disease.

KEYWORDS

Botulinum toxin type A; Complex approach; Rehabilitation; Torticollis spastica.