Use of an Interactive Voice Response System by patients with blepharospasm receiving repeated injections of NT 201 (Botulinum neurotoxin type A free from complexing proteins)

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Background

Bilateral blepharospasm is a chronic movement disorder characterized by involuntary, sustained, and painful contraction of the orbicularis oculi muscle that leads to facial incoordination. Several studies have shown that certain therapies are effective in the treatment of blepharospasm, including botulinum neurotoxin type A (BoNT/A) injections, surgical interventions, and oral medications. The complexity of these treatments, however, can make it difficult to evaluate the efficacy of new interventions.

Methods

The study was a multicenter (US and Canada), prospective investigation, with 14 centers. Participants were randomized to receive either NT 201 or placebo injections. A total of 150 patients were enrolled in the study; 75 were randomized to NT 201 and 75 to placebo. The study had an open-label extension phase

Results

Safety

The most common AEs in both injection cycles were eyelid ptosis and dry eye under treatment with NT 201; the most common AEs for the placebo group were muscle weakness, headache, and dry eye. The incidence of AEs was generally lower in the placebo group, as expected.

Correlation between IVRS and independent rater scores were shown to be highly significant (p<0.001) and consistent across all study visits during the placebo-controlled period.

Conclusions

The study demonstrates that NT 201 injection is safe and effective in the treatment of blepharospasm. The use of an Interactive Voice Response System improves patient compliance and reduces the burden of frequent clinic visits. The study also supports the use of NT 201 as a preferred treatment option for blepharospasm.