Botox (OnabotulinumtoxinA) for Treatment of Migraine Symptoms: A Systematic Review

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Abstract:

Background. Migraine is one of the most common types of headache, and it is the second most common cause of neurological disorders, with an annual prevalence of about 15% of the population. This study aimed to evaluate the effect of BoNT-A on the duration and intensity of migraine attacks. In addition, we investigated the effective injection sites. Methods. According to the Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) guidelines, we searched online databases, including Web of Science, PubMed, EMBASE, Scopus, Cochrane Library, ProQuest, ClinicalTrials.gov, and Google Scholar from 2011 to 2021. Results. A total of 24 articles were included in the study. The use of BoNT-A in individuals suffering from chronic migraine (CM) decreases the frequency of migraine attacks per month, pain intensity, medication use, emergency visits, and migraine-related disabilities. The BoNT-A was well tolerated and leads to improved performance and better quality of life (QoL). Overall, treatment with BoNT-A in adults with CM is beneficial. In addition, the use of BoNT-A in individuals with vestibular migraine (VM) reduces the frequency of migraines and brings about the improvement of disability status caused by migraine headaches. Meanwhile, the use of BoNT-A reduces the frequency of migraine attacks per month among individuals with chronic refractory migraine (CRM). Conclusions. The use of BoNT-A is a low-cost option for the treatment of various kinds of migraines, including chronic, episodic, unilateral, and vestibular types. BoNT-A can reduce the frequency of migraine attacks per month and diminish the severity of pain**.**

Keywords: Quality of life; Nervous system; Migraine; Headaches; Systematic review; Botulinum toxin