



Treating Migraines with Toxin

Dr Paul Charlson and Dr Vikram Swaminathan explain how botulinum toxin type A can be used to treat chronic migraines

Migraines are primarily a headache disorder, with acute attacks lasting between four and 72 hours. However, a migraine is not ‘just a headache’. It has a myriad of associated symptoms and is a debilitating condition for many, with an estimated 190,000 attacks per day in the UK and an estimated 25 million lost work days in the UK per year.¹

When a patient is experiencing an acute migraine, there is usually a prodromal period prior to the headache which might consist of symptoms such as irritability, tiredness, dizziness, hunger, nausea, or yawning, followed by an often unilateral headache and sometimes aura such as tingling, visual and speech disturbance. A recovery period lasting up to a few days will then take place, followed by a clear period with no symptoms.² A chronic migraine can be considered separately, and this is the category in which patients may seek the help of aesthetic practitioners to conduct botulinum toxin treatments.

Defining chronic migraines

The National Institute for Health and Care Excellence (NICE) guidance defines chronic migraine in accordance with the International Headache Society, stating it as the occurrence of headaches on 15 days or more per month, for at least three months, where the attacks

fulfil criteria for pain and associated symptoms of migraine. This must be without aura on at least eight days per month for at least three months, where there is no medication overuse, and where the headaches are not attributable to another causative disorder. To fulfil the criteria for chronic migraine, a person must previously have had at least five attacks fulfilling the International Headache Society's criteria for migraine without aura. Despite these criteria, in clinical practice, there is a lack of consensus regarding the definition of chronic migraine.³

Using toxin for migraine

The pathophysiology of a migraine is complex and there remains many

gaps in knowledge. There are complex neurochemical changes that create migraine headaches, and it has a strong genetic element.⁴ Botulinum toxin is not effective in other forms of headache such as tension headaches due to its mechanism of action. Botulinum toxin works in chronic migraine not by muscle relaxation, but the reduction of pain pathway expression in certain parts of the trigeminal system.⁵

Botulinum toxin in the form of Botox has a licence for use in chronic migraine, is recommended by NICE and can be used in the NHS within criteria that is locally determined and is invariably accessed via secondary-care contracts. NICE suggests that it may be an appropriate treatment in chronic migraine where patients have not responded to at least three prior pharmacological prophylaxis therapies and whose condition is appropriately managed for medication overuse.⁶ NICE guidance is generally used as a benchmark for local criteria.

NHS treatment of migraine with botulinum toxin is usually restricted to the NICE guidance, which states that three prophylactic drugs need to have been tried before botulinum toxin is used on a patient.⁷ NHS wait times and increased difficulties recently have resulted in patients not being commenced on botulinum toxin, or having their treatment programmes interrupted. In private practice, the decision to treat a patient is between the clinician and the patient based on clinical evaluation. Provided that the diagnosis is correct and red flags have been excluded, it is reasonable to start treatment. Although, it should be noted, that good communication with a patient's GP is important and considered good practice. We would suggest writing to the patient's GP to inform them that the patient has undergone migraine treatment with botulinum toxin, providing the number of units used.

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