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Neurologists should retain diagnostic and therapeutic management of migraines

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To the Editors

I read with interest Boczarska-Jedynak's article on a cross-sectional online survey using an electronic questionnaire among 81 aesthetic medicine professionals (AMPs) on knowledge and the standard of treatment of chronic migraine with botulinum toxin (BTX), brand OnaBoNT-A [1].

It turned out that only a third of the AMPs rated the effectiveness of BTX as good, and that most respondents wanted to expand their knowledge and skills regarding BTX treatment of migraine [1]. It was concluded that while there is willingness to treat migraine among AMPs, current knowledge and skills in migraine are limited, and that programmes should be established to educate physicians authorised to administer BTX to treat migraine with BTX [1]. Boczarska-Jedynak's study is excellent, but has limitations that should be discussed.

I disagree with the suggestion that AMPs should inject OnaBoNT-A for migraine [1]. Firstly, migraine is a neurological disorder and diagnostic and therapeutic management should remain in the hands of the neurologist. Secondly, migraine is often complicated by pre- or post-headache phenomena such as aura, hemiplegia, visual impairment, ophthalmoplegia, dizziness or gait disturbance, that require evaluation by a neurologist. Migraine can sometimes even be complicated by stroke or seizures [2]. Therefore, adequate post-ictal management [electroencephalogram (EEG), magnetic resonance imaging (MRI), prophylaxis] of migraine patients can only be carried out by neurologists. Thirdly, migraine can be a feature of a syndrome (e.g. MELAS) that requires extensive evaluation by specialised neurological centres. Another argument against AMPs for the treatment of migraine is that 13% of AMPs in the index study used BTX, regardless of whether the patients were diagnosed with migraine or not [1]. In addition, 21% responded that they knew nothing about migraine and seven respondents did not know the diagnostic criteria of migraine [1]. In addition, a non-neurologist may not be able to correct the diagnosis when symptoms and signs no longer meet the diagnostic criteria [3]. I also disagree with the statement in the introduction that AMPs have extensive BTX treatment experience [1]. Given that 26% of the index study respondents were dentists [1], it cannot be guaranteed that they were familiar with the use of BTX in migraine.

A limitation of the study is that it was conducted using an electronic questionnaire. The disadvantages of electronic questionnaires are that it is impossible to check whether the data provided is reliable, whether the addressees actually answered the questions themselves, that missing data cannot be replaced, and that additional, interesting, data cannot be obtained.

Another limitation is that alternative and less expensive therapy options for the treatment of migraine were not discussed. These include diet, the avoidance of triggering factors including certain medications, adequate water intake, nonsteroidal, anti-inflammatory drugs (NSAIDs), tryptanes, and monoclonal antibodies (e.g. erenumab). BTX should only be administered in refractory cases, in which neither prophylactic measures nor acute treatment lead to an adequate therapeutic response.

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The indication for BTX in migraine mentioned in the discussion is contradictory, since the indication also included tension-type headaches [1]. If chronic migraine is defined as the "presence of headache (tension-type and/or migraine) for at least 15 days/month during the last three months", patients with isolated tension-type headache, or a mixture of both migraine and a tension-type headache, could be treated with BTX. This discrepancy should be clarified.

Finally, it is questionable whether BTX is really effective for migraines or rather only for tension-type headaches or mixed headaches. In addition, it is conceivable that the effect of BTX in migraine patients is based on a placebo effect. As societies around the world are stressed and neuroticised by external influences or internal strains, they are affected by stress and therefore prone to muscle tension. In addition, it is possible that non-neurologists tend to interpret headaches more often as migraines simply for commercial reasons. If a migraine is diagnosed, BTX treatment is reimbursed but may not necessarily be indicated.

Overall, I feel that this interesting study has limitations which challenge the results and their interpretation. Addressing these limitations could further strengthen and reinforce the study. AMPs should not be included in the treatment of migraines. Headaches, whether primary or secondary, should remain the domain of the neurologist. The diagnostic and therapeutic management of chronic and episodic migraine is complex and constantly requires new considerations. For many patients, treatment cannot be standardised but must be individualised to achieve the optimal individual outcome.

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