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Detoxification for medication overuse headache is the primary task

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Abstract

Background: Common practice in patients overusing medication is to place major emphasis on detoxification.
Overview: This is based on decades of disappointing experience trying to treat patients with prophylactics despite medication overuse. Several trials have shown that, when patients are taken off medication overuse, approximately 50% of them get so much better that prophylactic drug treatment is no longer needed. There is no doubt that detoxification by one means or another is of crucial importance in the initial steps of treating patients who have a medication overuse. The methodology for detoxification may vary from country to country. Likewise, it varies whether patients are placed on prophylactic treatment simultaneously with detoxification or after a drug-free period of 2 months. Only future long-term studies can show whether one approach or the other is preferable.
Conclusion: Detoxification must always be the first consideration in overusing patients, but obviously accompanied by or followed up by the necessary prophylactic or treatment.

Keywords

Chronic migraine, medication overuse headache, detoxification, topiramate, onabotulinumtoxin A

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The concept of medication overuse headache has a long history. In the 1960s and the 1970s it became gradually clear to leaders in the field of headache such Marcia Wilkinson, John Graham and James W. Lance that the exaggerated intake of acute migraine medications, at the time primarily ergotamine, could make migraine patients worse and also could result in a lack of response to prophylactic medications (for references see (1)). Subsequently it was demonstrated that overuse of triptans and analgesics had the same effect (2). For decades, experienced clinicians had tried to treat patients with an overuse by giving them prophylactic drugs in the hope that amelioration of the headache would reduce drug intake. However, it was realized that, without detoxification, prophylactic drugs had little or no lasting effect. Eventually, this knowledge resulted in a practice where patients had to completely discontinue all analgesics and anti-migraine drugs before starting prophylactic medication (3). This became the standard of care in much of Europe, whereas in America and other parts of the world patients were detoxified and put on prophylaxis at the same time.

Further epidemiological studies have demonstrated that the most important aggravating factor causing a change from episodic to chronic migraine is medication overuse (4). Furthermore, patients who had previously been resistant to prophylactic migraine drugs responded to prophylactic treatment after detoxification in a tertiary headache referral centre (5,6). Few have studied how best to detoxify patients. The complete discontinuation of medications without drug treatment seems to be equally as good as NSAID or corticosteroids in first week of detoxification. Recently, the issue of when to start prophylactic treatment was examined in a controlled trial but with a low number of participants and a short follow-up (7). This study indicated that patients who received prophylactics immediately did better than patients who were kept medication free for 2 months. Unfortunately, numbers were too small and the results too surprising to be convincing: the result in the group that was detoxified only was much worse than results obtained in other centres (8).

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Recently, a study of the prophylactic effect of topiramate (6) and two others of the prophylactic effect of botulinum toxin (9,10) examined patients with and without medication overuse. The first study had a high drop-out rate and only 24 patients on topiramate and 13 on placebo completed. There was a significant effect of topiramate but, because of low numbers, this result must be taken with great caution. The difference between active and placebo was only 20% and it was meaningless to analyse the response in overusers vs. non-overusers because of low numbers. Furthermore, there was only a 3 month observation period. It is my past experience that patients with medication overuse may respond to prophylaxis initially but subsequently have recurrence unless dedicated efforts are applied to their detoxification. The studies of butolinum toxin have been heavily criticized for their general methodology (11). The therapeutic gain was only approximately 10% and there was no difference in the intake of symptomatic medication on active and placebo arms. Furthermore, there was no ascertainment of blinding. In fact a previous study of botulinum toxin demonstrated that studies cannot be blinded because of the weakness induced (12). With such a small therapeutic gain as in the two recent trials, it is meaningless to look into subgroups. There are also currently no published data on the subgroup overusing medication. Such data were presented at the IHS congress in Berlin June 2011 and are presented by my opponent. For reasons given above, they have little or no value.

The poor 3 month results in the studies of topiramate and botulinum toxin should be compared with the admittedly uncontrolled results of treatment in headache centres, where patients are primarily detoxified. We observed an effect in migraine of 75% improvement after detoxification followed by prophylaxis (8,13). In a study of a population-based sample of medication overusing patients with chronic headache, simple advice resulted in improvements that exceeded those reported in the topiramate and botulinum studies (14). Finally, in the COMOESTAS study - a multicentre study of medication overuse headache in Europe and Latin America reported in a poster at the International Headache Congress, detoxification combined with simultaneous prophylaxis resulted in an impressive 60% improvement after 6 months.

The poor long-term outcome in overusing patients prompted earlier clinicians to focus on detoxification. The short-term results quoted by my opponent have no importance in my opinion. We need studies of prophylaxis in overusing patients with 2 years of follow-up. Only if such studies show equality between regimes without detoxification and regimes with detoxification will there be evidence against current practice.

In conclusion, there is no doubt that the focus on medication overuse that has prevailed for many years needs to be maintained. Detoxification is paramount to obtain good long-term result in migraine patients, patients with chronic tension type headache and probably overusing patients with other headaches as well. What is less clear is the timing of prophylactic treatment. There are no good long-term studies to demonstrate whether prophylaxis should be started right away in parallel with detoxification or whether it is best to keep the patients medication free for a period of 2 months. One argument in favour of the latter is that half of all patients do not need prophylaxis after detoxification (6). Half of the patients are thus exposed unnecessarily to prophylactic drugs if started early. To solve this problem, long-term observations over at least 2 years are necessary. It has been assumed that the 2 months medication free period has an educational effect on patients, who learn that they can actually survive attacks without treatment. Although this is intuitively obvious, it needs to be documented by harder data. The controlled Norwegian study and the new COMOESTAS data suggest that early prophylaxis may be as good as or even better than a completely medication free period. The choice of method also depends on the kind of patients seen. At a tertiary headache referral centre patients have often received two, three or four prophylactic drugs before coming. In such cases, when only one or two more drugs remain untried, it might be wise to detoxify patients first, and then try one of the failed medications before using the last one or two untried possibilities.

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