Consensus treatment of medication overuse headache in Latin America and Europe

Jonathan H Smith1 and Todd J Schwedt2

Medication overuse headache (MOH) is preventable and treatable. However, MOH is a major contributor to headache-related disability, affecting up to 70% of patients in headache specialty practices (1). The management of MOH is complicated as patients often have difficulty stopping the overused medication and relapse rates following successful detoxification are high, consistent with the concept of MOH as a bio-behavioral disorder, with a shared neurobiology to addiction (2). Analgesics appear to carry varying risks for MOH among susceptible patients, with the strongest associations reported for opioid- and butalbital-containing analgesics (3,4). Non-steroidal anti-inflammatory drugs (NSAIDs) carry the lowest risk, and may even be protective in the development of chronic daily headache for patients with fewer than 10 headache days per month (5). Currently, there is no consensus regarding the optimal approach to management of MOH, with available evidence supporting advice alone (6), detoxification alone (6–9), detoxification with continuation or introduction of prophylactic treatment (6,8,9), and initiation of prophylactic treatment alone without detoxification (7,10,11). Although independent evidence exists for multiple approaches, the current data seem to support a combination of approaches as the most efficacious strategy (7–9). Further, there is no consensus as to whether outpatient or inpatient management is most appropriate, and only limited data on the value of cognitive-behavioral interventions for optimizing rates of successful detoxification and limiting recurrence (12).

In this issue of Cephalalgia, Tassorelli et al. report the results of a multicenter, multinational application of a consensus protocol for management of MOH (13). The investigators enrolled a total of 376 subjects in four centers in Europe and two centers in Latin America. The consensus interventions included advice to withdraw the overused medication (day 1), detoxification from the overused medication with the help of prescription antiemetic and analgesic medications (days 1–7), optional initiation of a preventive pharmacologic medication (used in majority of cases (82.9%) (started on days 1–7)), allowance for symptomatic treatment using a different medication than that previously overused (starting on day 8), and regular clinic follow-up over a 6-month period. The majority of patients were treated as outpatients (77.7%), but three centers used inpatient detoxification. For these three centers, the patients’ distance from the hospital and personal preferences were used to determine inpatient versus outpatient treatment. The subjects were mostly female, and afflicted with migraine, although 39 subjects (10.3%) had pure tension-type headache. Subjects were excluded if they had previously failed a prior detoxification protocol, were overusing ‘pure’ opioids, benzodiazepines or barbiturates, were currently treated with a preventative medication, and if they had significant psychiatric comorbidity. During the 6-month observation period, a larger proportion of subjects undergoing outpatient detoxification dropped out of the study (33.9%) compared with those undergoing inpatient detoxification (12.5%). Based on an intention-to-treat analysis, nearly two-thirds of patients were no longer overusing medications at the end of the study protocol and nearly half had reverted to an episodic headache pattern. Further, less than 10% relapsed during months 2 through 6 (i.e. stopped overusing during month 1, but then restarted overusing between months 2 and 6). Among patients who completed the detoxification treatment, inpatient and outpatient treatment strategies had similar efficacy.

The most important conclusion from this study is that MOH is a treatable condition across international borders and healthcare settings, with most patients benefiting from a combination of advice, detoxification,
prophylactic therapy and regular clinic follow-up (13). These conclusions confirm existing recommendations regarding MOH treatment. The multicenter international enrollment used in this study significantly strengthens the generalizability of these treatment strategies. However, the generalizability of study results is limited by the stringent exclusion criteria utilized. Importantly, prior detoxification failures, current prophylactic treatment, significant psychiatric illness and current use of pure opioids, benzodiazepines and barbiturates were exclusion criteria. Exclusion of patients with these characteristics likely biased the study towards favorable outcomes. Given this selection bias, it is also noteworthy that remission to episodic headache was only observed in half of the patients, and one-third of the outpatients did not complete the study. Therefore, there are likely to be fundamental insights into MOH pathogenesis and management which are yet to be discovered.

Furthermore, the lack of randomization, relatively small proportion of patients receiving inpatient treatment and small proportion of patients not receiving migraine prophylactic therapy, prevent firm conclusions being drawn regarding the optimal setting for detoxification and the effects of migraine prophylactic therapy on MOH treatment success rates. Future studies should further investigate these important MOH treatment factors. In addition, future studies might include more complex MOH patients (i.e. those failing prior detoxification attempts, those using opiates and barbiturates), randomize patients to standardized treatment interventions, identify baseline predictors of success with completing outpatient detoxification programs, investigate methods to optimize the proportion of patients completing outpatient detoxification and measure relapse rates during a longer follow-up period.

Conflict of interest

JHS has no disclosures or conflicts of interests to report. TJS Consulting: Allergan, Levadex, Pfizer, Supernus, Zogenix. Research grants: Merck.

References


