Opioids: The role in headache pharmacotherapy

Rob Hutchison, PharmD

INTRODUCTION

Opioid pharmacotherapy in the treatment of headaches may be viewed from dichotomous perspectives. The most common clinical application of opioids is for acute, symptomatic rescue in migraine headache. The second, more controversial application, is their use in a daily scheduled regimen to remediate intractable chronic daily headaches (CDH). The goal of this article is to describe the diagnostic criteria, cautions, and/or outcome measures for these opioid treatment modalities.

OPIOIDS FOR ACUTE, SYMPTOMATIC HEADACHE RELIEF

Opioids for short-term, symptomatic rescue therapy for migraine should be used with caution and vigilant monitoring for potential medication overuse headache (MOH). Opioids are a risk factor for MOH and transformed migraine, and patients who overuse opioids have high headache relapse rates after initially successful withdrawal.[1-4] In June of 2005, the International Headache Society (IHS) redefined the diagnostic criteria for an opioid overuse headache as the following[5]:

- headache present ≥ 15 days/month;
- opioid intake ≥ 10 days/month on a regular basis for > three months;
- headache markedly worsened during opioid overuse; and
- headache resolves or reverts to its previous pattern within two months after discontinuation of opioid.

MOH is being recognized more often in headache, neurology, and primary care clinics, but is still frequently overlooked. A lack of awareness by the clinician and patient is the primary contributor to the development of MOH.

OPIOIDS FOR REFRACTORY CHRONIC DAILY HEADACHES

The use of daily scheduled opioids (DSO) in treatment of CDH is a complex and controversial pharmacotherapy approach. A long-term (≥ three years) structured DSO clinical headache program analyzed the effectiveness, prevalence of problematic drug behavior, and predictors of long-term benefit.[6] To be eligible for the program, the patient must have failed to improve with aggressive, comprehensive care (i.e., hospitalization, detoxification, aggressive pharmacotherapy, and behavioral management) or else had medical conditions in which standard therapy is contraindicated. The DSO treatment program consisted of frequent follow-up office visits at four- to eight-week intervals. Effectiveness of DSO was measured by the Severe Headache Index (SHI). The SHI formula is determined by multiplying the frequency times duration of severe headaches per week.

Only 26 percent of patients benefited from DSO (defined as 50 percent improvement over baseline). The age, gender, and diagnosis of anxiety or depression had no association with success rate of DSO. Response to DSO during the first month was a strong predictor (67 percent) of which patients would continually benefit at the end of three years. The use of DSO was not associated with a decrease in the number of other prophylactic or abortive medications. All patients signed an agreement on entry to the clinical headache program clearly stating an understanding that the dose would not be self-modified, opioids would be prescribed from one headache center only, and opioids would be dispensed from one pharmacy only. Of the patients who stayed in the DSO program for at least three years, 50 percent committed one or more agreement violations.

SUMMARY

Optimal acute opioid management involves a continual awareness of the potential for development of MOH. Both the clinician and patient should be aware of the IHS MOH diagnostic criteria. Prophylactic medications should be initiated for patients having two

headache days per week. Reduction in headache risk factors should include behavioral modification approaches to headache control earlier in the natural history of migraine.

DSO therapy may provide significant long-term relief to a small percentage of patients suffering from intractable chronic daily headaches. A one-month DSO trial may provide a fair indication whether long-term DSO will be of benefit in the otherwise intractable cases.

Rob Hutchison is a clinical pharmacy specialist in pain management at Presbyterian Hospital of Dallas and assistant professor at Texas Tech University Health Sciences Center School of Pharmacy, in Dallas, Texas. Author email: robhutchison@texashealth.org.

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