

## Medication overuse headache - Should acute medications be withdrawn first?

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There is strong evidence that frequent use of acute medications can worsen the frequency and severity of migraine. The mechanisms by which this exacerbation of headache occurs are not known, but they may involve processes similar to opioid induced hyperalgesia. Some acute medications are likely to be more problematic for exacerbation of headache than others. Multiple studies have shown that withdrawal of frequently used acute medications can reduce headache frequency and severity. There is disagreement about whether preventive medication should be used prior to or during withdrawal of acute medications. I will make a case for withdrawal of acute medications before starting preventive therapy. Data from clinical trials of topiramate and onabotulinum toxin A for chronic migraine indicates that although both treatments resulted in a statistically significant reduction in headache, neither resulted in a significant reduction in acute medication use. This data suggests that these preventive medications may not be helpful in reducing acute use. It is possible that patients will do as well or better by simply withdrawing acute medications as compared with taking preventive medications that are expensive and may have significant side effects. It is logical to remove a clear exacerbating factor for headache first, before adding new drugs that may complicate the clinical picture, and may not in fact be necessary.

Andrew Charles, MD, is Professor and Director of the Headache Research and Treatment Program in the Department of Neurology at the David Geffen School of Medicine at University of California, Los Angeles (UCLA). He has recently been named the Meyer and Renee Luskin Chair in Migraine and Headache Studies at UCLA.

Dr. Charles received his medical degree from UCLA in 1986 and completed a residency and a research fellowship in neurology before becoming a professor at this institution. Now, as Director of the Headache Research and Treatment Program, Dr. Charles oversees a comprehensive effort toward advancing headache medicine that includes basic and clinical research, education, and patient care. His laboratory uses advanced imaging and electrophysiological techniques to investigate basic mechanisms of neuronal, glial, and vascular signaling related to migraine and other brain disorders.

Dr. Charles has been an associate editor of the journal *Cephalalgia* since 2009. He also serves on the board of directors of the American Headache Society, and the board of trustees of the International Headache Society. He is Co-Chair of the NINDS Common Data Elements Project Group for Headache.