

DIAGNOSIS/ TREATMENT OF REBOUND HEADACHES

John S. Warner, M.D.
Vanderbilt University
Nashville, TN

The portion on the diagnosis should be copied and read to the patient and spouse or other family members. Please do not use my name or Vanderbilt's name. We already have more patients than we can handle. This was prepared to help doctors, not solicit new business.

THE DIAGNOSIS OF REBOUND HEADACHE

Most patients with chronic daily headache are experiencing rebound headache (RH). The medications which are being used for today's pain "rebound" and cause tomorrow's headache.

The typical patient with RH describes a daily or almost daily, bilateral, continuous or almost constant, dull tension-type headache for which they are using daily or almost daily analgesics. In addition almost all of these patients have superimposed migraine attacks, which are more frequent, more intense and more prolonged than any episodic migraine they might have experienced in earlier years. After developing the daily headaches many of these patients note symptoms of depression including fatigue, weakness, insomnia, and cognitive dysfunction. Some note mild elevations of blood pressure and/or symptoms of fibromyalgia.

The unusual presentations of RH include: 1) the patient with only unilateral headache or even localized pain, 2) the person describing only frequent migraine without a tension-type component, 3) the young child with chronic daily headache, 4) the patient using only one or two analgesic tablets each day, 5) the patient who developed the daily headaches by using daily medications for pain but noted continuation of the daily headaches after reducing the medications to only one or two days each week and 6) the patient whose headaches began following trauma (often misdiagnosed as chronic post-traumatic headache).

When seen in the office these patients usually do not appear to be in pain. They describe their migraine and do not mention the daily or almost daily tension-type headaches.

The medications which might cause this phenomena include aspirin, acetaminophen, any nonsteroidal anti-inflammatory drug (with the possible exception of indomethacin), any opiate, ergotamine (not dihydroergotamine), a triptan or any combination of these. The exact role that caffeine plays in causing RH is unknown. Medications to prevent headache and antidepressants are ineffective in these patients.

The chemical basis for RH is possibly a change in serotonin receptors. There is no laboratory test for this condition. The diagnosis must be suspected from the history as described above. The past medical history, review of systems and physical examination should reveal no other likely cause for the daily headaches. The diagnosis can only be established by observing the gradual reduction and finally the termination of the previous daily headaches after the offending pain relief medications are completely withdrawn.

The endpoint of treatment should be six consecutive pain free days. The mean time to reach this goal is three months and some patients have to omit the analgesics for over six months before they note six consecutive days without a headache.

THE TREATMENT OF REBOUND HEADACHES

The following outpatient treatment protocol for rebound headache (RH) has been proved to be effective. In a prospective study¹ 30 of the 39 patients suspected of having RH who followed the instructions to abruptly stop all pain medications achieved the goal of six consecutive days without any headache, the mean time to reach this endpoint being 91 days. Of the remaining patients eight showed varying degrees of improvement and one failed to show any improvement.

If the patient shows no improvement after completely avoiding the forbidden medications for two months, the diagnosis should be reconsidered. If RH is still suspected, they can at that time be offered inpatient treatment with intravenous dihydroergotamine following the Raskin approach.

After obtaining a detailed history and performing a thorough neurological examination to exclude other conditions, proper treatment includes five steps:

First the patient must be given a thorough explanation of the "most likely cause " of their headaches and told that there is no rapid cure for them.

Second they be given a list of medications to completely avoid until they reach the six day headache free goal.

<u>Stop</u>	<u>Examples</u>
aspirin	Bufferin, BC Powders, Excedrin
acetaminophen	` Fiorcet, Tylenol
NSAIDs	Advil, Aleve, ibuprofen
opiates	codeine, Stadol, Ultram
ergotamine	Cafergot, Methesergide
triptans	Amerge, Axert, Imerge, Maxalt, Zomig
caffeinated beverages	coffee, many colas

(The exact role that caffeine plays has not been proven, but it is felt prudent to stop caffeine at this time.)

Third they should be told to avoid treating minimal or moderate pain. Their headaches might intensify for the first week. For excruciating headache they can be instructed to self-administer 1 cc (1 mg) DHE (dihydroergotamine) by either intramuscular or subcutaneous route, preceding the dose by a 10 mg tablet of metoclorpramide if the DHE causes increased nausea or vomiting. They should be told the usual side effects of DHE, including burning at the injection site,

increased nausea, and esophageal spasm (chest pain), each of which usually clears after 30 minutes. The limit on self-administered DHE is two injections per 24 hours, separated by at least two hours. There is no limit on the number of days a week DHE can be given. If the patient cannot use DHE due to suspected ischemic heart disease, uncontrolled hypertension or stroke, they can self-administer droperidol 2.5 mg IM. If DHE fails to provide relief, an emergency center can give 10 mg prochlorperazine intravenously by slow push. The patient must be told to refuse narcotics, triptans or other medications offered by the emergency center.

Fourth the patient should be instructed to keep a careful headache calendar, listing the date, presence of headache, severity, time of onset, duration, treatment and result of that, treatment.

Finally the patient must be asked if they have further questions about their condition or the instructions. They should be given an appointment for a return visit in four to eight weeks. Don't forget to give the prescriptions for DHE ampoules with syringes and metoclopramide (ten tablets usually suffices).

Your success in treatment might improve if one week later you or your nurse calls the patient and asks if they are complying with the instructions and showing any improvement. Certainly the patients appreciate this step.

Instructions for patient after they have reached the goal of six consecutive headache free days

- 1) In future months and years limit the previously forbidden pain medications to two days per week. If this limit is exceeded, there is a risk of return of the daily headaches.
- 2) Caffeinated beverages can be resumed - very slight risk of return of daily, prolonged headache. If the daily headaches return, stop the caffeine.
- 3) Triptans can be used at the onset migraine, the goal being termination of the headache within three hours.
- 4) Continue the headache calendar.

Reference: Warner JS. The outcome of treating patients with suspected rebound headache. Headache 2001;41: 685-692.

