

## Overuse (Rebound) Headaches

I. An individual with episodic migraine headaches may progress to a daily headache pattern (transformed migraine) if they are using medications for acute treatment of headaches three or more days per week.

A. Offending medications include: Tylenol, Lortab, Triptans, Excedrin Migraine, Fiorinal/Fioricet, other narcotic medications, non-steroidal anti-inflammatory medications (ibuprofen, Advil, Naprosyn, Aleve, etc.)

B. Contrary to common belief, narcotic medications such as Lortab and Percocet make migraine headaches worse because they produce vasodilatation and inflammation which are both components of a migraine headache. These medications are most helpful for post-operative and musculoskeletal pain.

C. Preparations containing caffeine are a common cause of overuse headaches.

## II. Pathophysiology of Overuse Headaches:

A. 5 HT-1 receptors are serotonin receptors which decrease headache pain when stimulated.

B. 5 HT-2 receptors are serotonin receptors which increase headache pain when stimulated.

C. Chronic overuse of medications



Decrease in serotonin in central nervous system



Increase in number of 5 HT-2 receptors



Increase in headache frequency and pain



Damage to the periaqueductal grey matter in the brain may lead to permanent damage which will not improve with removal of offending drugs!