Risk Factors/Suspected Causes of Frequent Headache

- Overuse of medications, esp. analgesics +/- caffeine
- Depression
- Sleep disturbances
- Stress or traumatic life events
- Personality traits (e.g., neuroticism, type A)
- Hypertension
- Dietary triggers

Adapted with permission from Walter Stewart, MD, MPH.
In case reports and population studies, a number of putative risk factors have been linked to the development of chronic daily headache—defined as headaches occurring at least 180 days per year. Chronic daily headache encompasses chronic tension-type headache, transformed migraine (a daily headache pattern evolving from episodic migraine), hemicrania continua, or new daily persistent headache.

These risk factors—listed roughly in order of frequency in reported studies—have been identified primarily in retrospective or descriptive studies of clinic patients, who may not be representative of patients with frequent headache. To date, no prospective studies have been done to establish a causative link between, for example, analgesic use and chronic daily headache. While withdrawal of overused analgesics, barbiturates or ergotamine compounds has been frequently reported to result in improvement, high dropout rates complicate attempts to formally study the association between analgesic use and chronic daily headache.
A recent population-based study by Ann Scher and colleagues has suggested that, in order of relative importance, head injury, stressful life events, and analgesics with caffeine may be significant risk factors for the development of chronic daily headache. This study identified 206 chronic daily headache patients from a random sample of over 13,000 adults, who were then interviewed by phone, along with 507 gender- and age-matched controls. Current exposure to risk factors as well as exposure prior to onset of frequent headache was assessed. A randomly selected time point was used for risk factor exposure in controls. As shown, patients with chronic daily headache report significantly greater life event stress in several areas. Comorbid depression, which occurs in up to 80% of chronic daily headache sufferers, frequently improves when the cycle of daily head pain is interrupted (Mathew NT. Transformed migraine. Cephalalgia 1993; 13(suppl.12):78-83; and Saper JR. Headache disorders: current concepts in treatment strategies. Boston: Wright-PSG, 1983).
Stressful Life Event Scores Prior to Onset of Chronic Daily Headache vs Controls

Ann Scher et al, data presented at AHS Scientific Meeting, Montreal, 2000. Adapted with permission from Walter Stewart, MD, MPH.