Alcohol, Smoking, and Caffeine Use Among Headache Patients

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We reviewed the charts of 151 headache patients, seen initially in a specialty headache center between 1988 and 1994, to collect information regarding reported alcohol consumption, smoking, daily number of caffeinated beverages, and medications. Charts of 50 patients in a general medicine clinic were reviewed for the same information.

No significant differences between headache patients and general medicine patients were found in consumption of alcohol, smoking, or caffeinated beverages. Thirty headache patients (20%) used caffeine-containing medications more frequently than recommended; 24 of these patients used the products daily; 18 of those had a greater caffeine intake from medications than from beverages. Over-the-counter caffeine-containing analgesics were overused by 12 of the patients compared to 21 patients who overused prescription caffeine-containing preparations.

Headache patients consume minimal amounts of alcohol, tobacco, and caffeinated beverages. However, headache patients often use caffeine-containing analgesics more frequently than recommended, which may lead to rebound and withdrawal headache.

Key words: headache, analgesics, caffeine, alcohol, smoking

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Common headache precipitants include foods, stress, changes in sleep patterns, weather changes, and menses. Chronic headache patients can identify and, therefore, avoid certain foods, beverages, and activities which trigger or worsen their headaches. Headaches influence a patient's quality of life and often require alterations in their social activities. Therefore, habits such as the consumption of alcohol, smoking, and dietary caffeine use may be different in a headache population.

Caffeine-containing analgesic combinations are used for treatment of tension-type headache and migraine. Caffeine is a useful adjuvant to simple analgesics and may have some intrinsic analgesic properties.[1-3] However, with consumption of dietary caffeine, symptoms such as indigestion, palpitations, tremor, and headache can occur.[4] In addition to dietary sources such as coffee, tea, and cola, caffeine is contained in various medications.

We evaluated the alcohol and caffeine-containing beverage consumption and smoking habits of headache patients to determine any difference from the habits of general medicine patients. We also evaluated the amount of caffeine that headache patients consume in analgesic preparations to relieve their pain.

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PATIENTS AND METHODS

This study was a retrospective chart review. Of 219 new and established patients evaluated and treated at the Headache Center of the Cleveland Clinic Foundation in November 1994, the first 151 available charts were reviewed. The Headache Center of the Cleveland Clinic Foundation, in the Department of General Internal Medicine, is a national referral center which also serves as a primary care resource for the community. It is part of a multispecialty group practice (The Cleveland Clinic Foundation). The patients in this report represent a mixture of both tertiary care referrals and primary care self-referrals. All patients in this group sought care specifically for their headache problems. While this group consisted of individuals largely without other significant medical problems, we did not exclude headache sufferers with concomitant medical illnesses. At the time of the initial visit to the clinic, between 1988 and 1994, patients responded to a general health questionnaire and/or an interview during the visit regarding their alcohol consumption, smoking, and daily number of caffeinated beverages (coffee, tea, soda). Headache patients also reported factors such as alcohol, smoke, foods, and beverages that could trigger a headache.

Charts of 50 new or established patients evaluated and treated for outpatient medical conditions other than headache in the General Internal Medicine Clinic at the Cleveland Clinic Foundation during January 1995 were reviewed for information regarding their alcohol consumption, smoking, and daily number of caffeinated beverages (coffee, tea, soda).

The dosages of all medications, including over-the-counter and prescription drugs, were reported. Caffeine content in milligrams was calculated for each beverage and medication as listed in Tables 1-3.[5-6] "Excessive use" was defined by consumption on a regular basis of 30 or more caffeine-containing analgesics per month.[7]

Statistical analysis was performed using Fisher's exact test.

RESULTS

The headache diagnoses of the 151 patients are shown in Table 4. Only 3 patients had cluster head-