

Headache journal (Vol 41, issues1-6)

Selected Abstracts from Headache journal:

The following are abstracts from recent issues of Headache journal (Vol 41, Issues 1-6). They are selected for their practical relevance to the management of headache patients.

Amitriptyline treatment in chronic drug-induced headache: a double-blind comparative pilot study.

Descombes S, Brefel-Courbon C, Thalamas C, Albucher JF,
Rascol O, Montastruc JL, Senard JM
Headache 2001 Feb 41:178-82

OBJECTIVE:

To assess the effects of amitriptyline and sudden analgesic withdrawal on headache frequency and quality of life in patients suffering from chronic daily headache related to analgesics abuse.

METHODS:

Seventeen nondepressed patients with chronic drug-induced headache were included in a 9-week, parallel-group, randomized, double-blind, placebo-controlled study. After abrupt analgesic withdrawal, amitriptyline or an active placebo (trihexyphenidyl) was started. The primary efficacy variable was headache frequency recorded on a headache diary in the last 4 weeks of each treatment. The secondary efficacy variable was quality of life (Nottingham Health Profile).

RESULTS:

Headache frequency decreased by 45% in the amitriptyline group and by 28% in the trihexyphenidyl group. Amitriptyline enhanced all the dimensions of quality of life and significantly improved emotional reaction and social isolation.

CONCLUSION:

This pilot study suggests a beneficial effect of amitriptyline on headache frequency and quality of life for patients with chronic drug-induced headache.

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Efficacy of intravenous magnesium sulfate in the treatment of acute migraine attacks.

Demirkaya S, Vural O, Dora B, Topçuoglu MA
Headache 2001 Feb 41:171-7

OBJECTIVE:

To study the efficacy and tolerability of 1 g of intravenous magnesium sulfate as acute treatment of moderate or severe migraine attacks.

BACKGROUND:

Migraine is a common disorder in which not only the pain but also the accompanying symptoms such as nausea and vomiting reduce activity and productivity of sufferers. Many drugs used for the treatment of acute migraine attacks have many side effects, are not well tolerated, are ineffective in some patients, or cannot be used during pregnancy or in patients with ischemic heart disease. Magnesium deficiency has been proposed to play a role in the pathophysiology of migraine, and recently treatment of migraine with magnesium has gained considerable interest.

METHODS:

This was a randomized, single-blind, placebo-controlled trial including 30 patients with moderate or severe migraine attacks. Fifteen patients received 1 g intravenous magnesium sulfate given over 15 minutes. The next 15 patients received 10 mL of 0.9% saline intravenously. Those in the placebo group with persisting complaints of pain or nausea and vomiting after 30 minutes also received 1 g magnesium sulfate intravenously over 15 minutes. The patients were assessed immediately after treatment, and then 30 minutes and 2 hours later. Intensity of pain, accompanying symptoms, and side effects were noted.

RESULTS:

All patients in the treatment group responded to treatment with magnesium sulfate. The pain disappeared in 13 patients (86.6%); it was diminished in 2 patients (13.4%); and in all 15 patients (100%), accompanying symptoms disappeared. In the placebo group, a decrease in pain severity but persisting nausea, irritability, and photophobia were noted in 1 patient (6.6%). Accompanying symptoms disappeared in 3 patients (20%) 30 minutes after placebo administration. All patients initially receiving placebo were subsequently given magnesium sulfate. All of these patients responded to magnesium sulfate. In 14 patients (93.3%), the attack ended; in 1 patient (6.6%), pain intensity decreased; and in all 15 patients (100%), accompanying symptoms disappeared. Both the response rate (100% for magnesium sulfate and 7% for placebo) and the pain-free rate (87% for magnesium sulfate and 0% for placebo) showed that magnesium sulfate was superior to placebo. Twenty-six patients (86.6%) had mild side effects which did not necessitate discontinuing treatment during magnesium sulfate administration.

CONCLUSION:

Our results show that 1 g intravenous magnesium sulfate is an efficient, safe, and well-tolerated drug in the treatment of migraine attacks. It is possible that magnesium sulfate could be used in a broader spectrum of patients than other drugs commonly used for attack treatment. In view of these results, the effect of magnesium sulfate in acute migraine should be examined in large-scale studies.

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The role of anger and depression in recurrent headache.

Venable VL, Carlson CR, Wilson J
Headache 2001 Jan 41:21-30

Individuals with tension-type headache report significant anger, depression, anxiety, and stressors. However, it is not clear to what extent these variables are interrelated.

The objective of the present study was to explore the role of anger in headaches, and to examine its relationship to anxiety, depression, and daily life stressors. Participants were 65 young adult women who suffered from recurrent headaches. The sample was obtained in a large-scale screening of young adult women using the Headache Symptoms List to identify those with recurrent headache. Those individuals reporting headaches completed a battery of assessment measures that included the State-Trait Anger Expression Inventory, the Mood and Anxiety Symptoms Questionnaire, and the Hassles Scale.

Results revealed a significant relationship between anger suppression and depression ($r = 0.40$, $P < .01$), as well as anger expression and anxiety ($r = 0.41$, $P < .01$) for those with headache. The use of the Mood and Anxiety Symptoms Questionnaire allowed for the separate analysis of general distress symptoms and symptoms more specific to anxiety and depression. Results indicated that those with headache experience more general, nonspecific distress rather than symptoms indicative of anxiety and depression ($P < .01$). In addition, the mixed headache group scored high on both general (mean, 28.96) and specific measures of depression (mean, 65.76) and on anger suppression (mean, 20.12), suggesting that they might experience more

psychological distress than those with tension-type headache. The present results indicate the need to distinguish the unique dimensions of anxiety and depression that should be assessed in the population with recurrent headache.

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Headache characteristics and race in Singapore: results of a randomized national survey

Ho KH, Ong BK

Headache 2001 Mar 41:279-84

This study presents the first account of the racial differences in headache prevalence and characteristics in the Singapore population. A questionnaire was administered to 2096 individuals from a randomized sample of 1400 households to test the hypothesis that race was independently correlated with headache diagnosis and morbidity.

The overall lifetime prevalence of headaches in the study population was 82.7%; this did not vary between racial groups. The modal age of headache onset in all races was in the second decade and was similar in all races. Multivariate analysis showed that headache morbidity was independent of age, sex, income level, marital status, shift duties, and educational level, and correlated only with race and a positive family history of severe headache. Non-Chinese were more likely to suffer from severe headaches than Chinese, were more likely to seek medical attention, and were more likely to require medical leave for their symptoms. Non-Chinese had more migrainous headaches than Chinese, although characteristics of headache both groups experienced that were unrelated to severity differed only in a few aspects.

We conclude that racial factors account for differences in headache classification, perception of headache severity and health-seeking behavior.

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Divalproex in the long-term treatment of chronic daily headache.

Freitag FG, Diamond S, Diamond ML, Urban GJ

Headache 2001 Mar 41:271-8

OBJECTIVE: The purpose of this study was to assess the safety and efficacy of divalproex sodium in the long-term treatment of chronic daily headache. Correlations between treatment variables were assessed.

BACKGROUND:

Controlled and open-label trials of divalproex sodium have previously demonstrated its efficacy and safety in the treatment of migraine and chronic daily headaches. These data were primarily short-term and did not examine interaction between treatment variables.

METHODS:

Retrospective chart review with data extraction was conducted from headache diaries of 642 current patients under treatment with divalproex sodium for chronic daily headaches. One hundred thirty-eight of the patients were treated with only divalproex sodium. Demographic variables including age, sex, initial and final body weights, adverse events, dose of divalproex sodium, duration of treatment, and the ability to differentiate their chronic daily headache into its migraine and tension-type headache components were analyzed. Baseline and end of study headache frequency indices were obtained.

RESULTS:

The mean improvement was 47%, with an improvement in migraine of about 65%. At least a 50% reduction in headache frequency was reported by 93 of the 138 patients receiving treatment with only divalproex sodium. No correlation between response and age, sex, duration of treatment, and the prescribed dose of divalproex sodium was demonstrated. Adverse events occurred in approximately 35% of the patients. None were severe. Women were more likely to experience adverse effects than men. Weight gain, however, occurred less commonly in women (mean, 1.9 lbs) than in men (mean, 7 lbs). Initial body weight and age did not correlate with the weight change.

CONCLUSIONS: Divalproex sodium can be used for a prolonged period as a sole agent for the successful treatment of chronic daily headache. Nearly 75% of the patients had at least a 50% reduction in headache frequency, and adverse effects occurred in approximately one third. Weight gain was negligible and hepatotoxicity did not occur during treatment periods of up to 6 years.

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Headache in divers.

Cheshire WP, Ott MC
Headache 2001 Mar 41:235-47

The increasing popularity of scuba diving has added a new category to the differential diagnosis of headache. Headache in divers, while uncommon and generally benign, can occasionally signify serious consequences of hyperbaric exposure such as arterial gas embolism, decompression sickness, and otic or paranasal sinus barotrauma. Inadequate ventilation of compressed gases can lead to carbon dioxide accumulation, cerebral vasodilatation, and headache.

Other types of headache encountered in divers include exertional headache, cold stimulus headache, migraine, tension-type headache, acute traumatic headache, cervicogenic headache, carbon monoxide poisoning headache, and headache associated with envenomation. Correct diagnosis and appropriate treatment require a careful history and neurologic examination as well as an understanding of the unique physiologic stresses of the subaquatic environment.

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A History of Migraine Is Not A Risk Factor to Develop an Ischemic Stroke in the Elderly.

Mosek A, Marom R, Korczyn AD, Bornstein N
Headache 2001 Apr 41:399-401

OBJECTIVE:

To assess the prevalence of migraine in elderly patients hospitalized with ischemic stroke compared with vascular and nonvascular control groups.

BACKGROUND:

Migraine is a disease with a presumed vascular mechanism. While migraine is a common complaint of young victims of ischemic stroke, it is unclear whether a current or past history of

migraine constitutes a risk factor for developing an ischemic stroke in the elderly.

METHODS:

We obtained current and past headache history from 100 consecutive patients hospitalized with ischemic stroke (aged 60 years or older) and compared the results with 100 patients hospitalized due to acute myocardial infarction and 100 hospitalized patients with no vascular disease.

RESULTS:

The sex and the age of the patients did not differ among the groups. The lifetime prevalence of migraine (8% of the patients with ischemic stroke, 8% of the nonvascular controls, and 15% of the patients with acute myocardial infarction) or of all types of headaches (27%, 30%, and 15%, respectively), did not differ significantly between the groups.

CONCLUSIONS:

Based on the reported history, elderly migraineurs are not at increased risk to develop ischemic stroke.

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Precipitating and aggravating factors of migraine versus tension-type headache.

Spierings EL, Ranke AH, Honkoop PC
Headache 2001 Jun 41:554-8

OBJECTIVE:

We conducted the present study to determine whether there are headache precipitating and aggravating factors that differentiate migraine from tension-type headache and headache precipitating and aggravating factors that differentiate tension-type headache from migraine.

METHODS:

We interviewed 38 patients with migraine and 17 patients with tension-type headache (diagnosed using International Headache Society criteria) by telephone, using a questionnaire.

The questionnaire inquired about the following precipitating and aggravating headache factors: (1) physical activity, (2) straining, (3) bending over, (4) stress/tension, (5) coughing/sneezing, (6) fatigue, (7) reading, (8) driving, (9) lack of sleep, (10) specific foods/drinks, (11) alcohol, (12) not eating on time, (13) smoke, (14) smell, (15) light, (16) noise, (17) menstruation, and (18) weather.

RESULTS:

The most common precipitating factors acknowledged by both groups of patients were stress/tension, not eating on time, fatigue, and lack of sleep. Weather, smell, smoke, and light were the precipitating factors that differentiated migraine from tension-type headache. Excluding those factors that are part of the International Headache Society migraine diagnosis, the aggravating factors were straining, bending over, and smell. We found no precipitating or aggravating factors differentiating tension-type headache from migraine.

CONCLUSION:

Apparently there are precipitating and aggravating factors differentiating migraine from tension-type headache but not vice versa. It is interesting that three of the migraine-specific precipitating factors (ie, weather, smell, and smoke) involve the nose/sinus system, suggesting a greater significance of this system in headache than is generally considered.

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