

## BRIEF REPORT

# The International Classification of Headache Disorders, 2nd Edition (ICHD-II)—revision of criteria for 8.2 *Medication-overuse headache*

SD Silberstein, J Olesen, M-G Bousser, H-C Diener, D Dodick, M First, PJ Goadsby, H Göbel, MJA Lainez, JW Lance, RB Lipton, G Nappi, F Sakai, J Schoenen & TJ Steiner on behalf of the International Headache Society

## Cephalalgia

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Stephen D Silberstein MD, Professor of Neurology, Thomas Jefferson University, Philadelphia, PA, USA. Received 30 June 2004, accepted 29 July 2004

### Introduction

The ICHD-II criteria for 8.2 *Medication-overuse headache* have been revised based on constructive criticism at the International Headache Research Seminar in Copenhagen in March 2004. The major changes are: (i) elimination of the headache characteristics; and (ii) a new subform (8.2.6 *Medication-overuse headache attributed to combination of acute medications*) that takes into account patients overusing medications of different classes but not any single class.

The revised section is below.

### 8. Headache attributed to a substance or its withdrawal

- 8.2 Medication-overuse headache (MOH)
  - 8.2.1 Ergotamine-overuse headache
  - 8.2.2 Triptan-overuse headache
  - 8.2.3 Analgesic-overuse headache
  - 8.2.4 Opioid-overuse headache
  - 8.2.5 Combination analgesic-overuse headache
  - 8.2.6 Medication-overuse headache attributed to combination of acute medications
  - 8.2.7 Headache attributed to other medication overuse
  - 8.2.8 Probable medication-overuse headache

### General comment

*Definite or probable?* In the particular case of 8.2 *Medication-overuse headache*, a period of 2 months after cessation of overuse is stipulated in which improvement (resolution of headache, or reversion to its previous pattern) must occur if the diagnosis is to be definite. Prior to cessation, or pending improvement within 2 months after cessation, the diagnosis 8.2.8 *Probable medication-overuse headache* should be applied. If such improvement does not then occur within 2 months, this diagnosis must be discarded.

### 8.2 Medication-overuse headache (MOH)

#### *Previously used terms*

Rebound headache, drug-induced headache, medication-misuse headache.

#### *Diagnostic criteria*

A Headache<sup>1</sup> present on  $\geq 15$  days/month fulfilling criteria C and D.

<sup>1</sup>The headache associated with medication overuse is variable and often has a peculiar pattern with characteristics shifting, even within the same day, from migraine-like to those of tension-type headache.

- B Regular overuse<sup>2</sup> for >3 months of one or more drugs that can be taken for acute and/or symptomatic treatment of headache.<sup>3</sup>
- C Headache has developed or markedly worsened during medication overuse.
- D Headache resolves or reverts to its previous pattern within 2 months after discontinuation of overused medication.

*Comments*

MOH is an interaction between a therapeutic agent used excessively and a susceptible patient. The best example is overuse of symptomatic headache drugs causing headache in the headache-prone patient. By far the most common cause of migraine-like headache occurring on  $\geq 15$  days per month and of a mixed picture of migraine-like and tension-type-like headaches on  $\geq 15$  days per month is overuse of symptomatic antimigraine drugs and/or analgesics. Chronic tension-type headache is less often associated with medication overuse but, especially amongst patients seen in headache centres, episodic tension-type headache has commonly become a chronic headache through overuse of analgesics.

Patients with a pre-existing primary headache who develop a new type of headache or whose migraine or tension-type headache is made markedly worse during medication overuse should be given both the diagnosis of the pre-existing headache and the diagnosis of 8.2 *Medication-overuse headache*.

The diagnosis of MOH is clinically extremely important because patients rarely respond to preventative medications whilst overusing acute medications.

8.2.1 *Ergotamine-overuse headache*

*Diagnostic criteria*

- A Headache fulfilling criteria A, C and D for 8.2 *Medication-overuse headache*.
- B Ergotamine intake on  $\geq 10$  days/month on a regular basis for >3 months.

<sup>2</sup>Overuse is defined in terms of duration and treatment days per week. What is crucial is that treatment occurs both frequently and regularly, i.e. on 2 or more days each week. Bunching of treatment days with long periods without medication intake, practised by some patients, is much less likely to cause medication-overuse headache and does not fulfil criterion B.

<sup>3</sup>MOH can occur in headache-prone patients when acute headache medications are taken for other indications.

*Comment*

Bioavailability of ergots is so variable that a minimum dose cannot be defined.

8.2.2 *Triptan-overuse headache*

*Diagnostic criteria*

- A Headache fulfilling criteria A, C and D for 8.2 *Medication-overuse headache*.
- B Triptan intake (any formulation) on  $\geq 10$  days/month on a regular basis for >3 months.

*Comment*

Triptan overuse may increase migraine frequency to that of chronic migraine. Evidence suggests that this occurs sooner with triptan overuse than with ergotamine overuse.

8.2.3 *Analgesic-overuse headache*

*Diagnostic criteria*

- A Headache fulfilling criteria A, C and D for 8.2 *Medication-overuse headache*.
- B Intake of simple analgesics on  $\geq 15$  days/month<sup>4</sup> on a regular basis for >3 months.

8.2.4 *Opioid-overuse headache*

*Diagnostic criteria*

- A Headache fulfilling criteria A, C and D for 8.2 *Medication-overuse headache*.
- B Opioid intake on  $\geq 10$  days/month on a regular basis for >3 months.

*Comment*

Prospective studies indicate that patients overusing opioids have the highest relapse rate after withdrawal treatment.

8.2.5 *Combination analgesic-overuse headache*

*Diagnostic criteria*

- A Headache fulfilling criteria A, C and D for 8.2 *Medication-overuse headache*.
- B Intake of combination analgesic medications<sup>5</sup> on  $\geq 10$  days/month on a regular basis for >3 months.

<sup>4</sup>Expert opinion rather than formal evidence suggests that use on  $\geq 15$  days/month rather than  $\geq 10$  days/month is needed to induce analgesic-overuse headache.

<sup>5</sup>Combinations typically implicated are those containing simple analgesics combined with opioids, butalbital and/or caffeine.

8.2.6 Medication-overuse headache attributed to combination of acute medications

Diagnostic criteria

- A Headache fulfilling criteria A, C and D for 8.2 Medication-overuse headache.
- B Intake of any combination of ergotamine, triptans, analgesics and/or opioids on  $\geq 10$  days/month on a regular basis for  $> 3$  months without overuse of any single class alone.<sup>6</sup>

8.2.7 Headache attributed to other medication overuse

Diagnostic criteria

- A Headache fulfilling criteria A, C and D for 8.2 Medication-overuse headache.
- B Regular overuse<sup>7</sup> for  $> 3$  months of a medication other than those described above.

8.2.8 Probable medication-overuse headache

Diagnostic criteria

- A Headache fulfilling criteria A and C for 8.2 Medication-overuse headache.
- B Medication overuse fulfilling criterion B for any one of the subforms 8.2.1–8.2.7.
- C One or other of the following:
  - 1 Overused medication has not yet been withdrawn.
  - 2 Medication overuse has ceased within the last 2 months but headache has not so far resolved or reverted to its previous pattern.

Comments

Codable subforms of 8.2.8 Probable medication-overuse headache are 8.2.8.1 Probable ergotamine-overuse headache, 8.2.8.2 Probable triptan-overuse headache, 8.2.8.3 Probable analgesic-overuse headache, 8.2.8.4 Probable opioid-overuse headache, 8.2.8.5 Probable combination analgesic-overuse headache, 8.2.8.6 Headache probably attributed to overuse of acute medication combinations and 8.2.8.7 Headache probably attributed to other medication overuse.

Many patients fulfilling the criteria for 8.2.8 Probable medication-overuse headache also fulfil criteria for either 1.6.5 Probable chronic migraine or 2.4.3 Probable

chronic tension-type headache. They should be coded for both until causation is established after withdrawal of the overused medication. Patients with 1.6.5 Probable chronic migraine should additionally be coded for the antecedent migraine subtype (usually 1.1 Migraine without aura).

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Bibliography

- Ala-Hurula V, Myllyla V, Hokkanen E. Ergotamine abuse: results of ergotamine discontinuation with special reference to the plasma concentrations. *Cephalalgia* 1982; 2:189–95.
- Ala-Hurula V, Myllyla V, Hokkanen E, Tokola O. Tolfenamic acid and ergotamine abuse. *Headache* 1981; 21:240–2.
- Allgulander C. History and current status of sedative-hypnotic drug use and abuse. *Acta Psychiatr Scand* 1986; 73:465–78.
- Andersson PG. Ergotamine headache. *Headache* 1975; 15:118–21.
- Baar HA. Treatment for headache: a four-step standardized withdrawal program for analgesic abusers. *Pain Clin* 1990; 3:173–7 (Abstract).
- Bennett WM, DeBroe ME. Analgesic nephropathy: a preventable renal disease. *N Engl J Med* 1989; 320:1269–71.
- Bowdler I, Killian J, Gänsslen-Blumberg S. The association between analgesic abuse and headache—coincidental or causal. *Headache* 1988; 28:494.

<sup>6</sup>The specific subform(s) 8.2.1–8.2.5 should be diagnosed if criterion B is fulfilled in respect of any one or more single class(es) of these medications.

<sup>7</sup>The definition of overuse in terms of treatment days per week is likely to vary with the nature of the medication.

- Braithwaite RA. The toxicity of tricyclic and newer antidepressants. In: DeWolff FA, editor. Handbook of clinical neurology. New York: Elsevier Science, 1995:311–20.
- Brust JC. Opiate addiction and toxicity, Chapter 16. In: DeWolff FA, editor. Handbook of clinical neurology, Vol. 65. New York: Elsevier Science, 1995:356–61.
- Catarci T, Fiacco F, Argentino C. Ergotamine-induced headache can be sustained by sumatriptan daily intake. *Cephalalgia* 1994; 14:374–5.
- Centonze V, Polite BM, diBari M, Caporaletti P, Albano O. Vascular injuries in ergotamine abuse: a case report. *Funct Neurol* 1993; 8:265–70.
- Dalquen P, Fasel J, Mihatsch MJ, Rist M, Rutishauser G. Phenacetinabusus IV. Sind zytologische Harnuntersuchungen in der Tumovorvorsorge bei Phenacetinabusern erfolgversprechend und anwendbar. *Schweizerische Med Wochenschr* 1980; 110:302–6.
- DeBroe ME, Elseviers MM. Analgesic nephropathy—still a problem? *Nephron* 1993; 64:505–13.
- deMarinis M, Janiri L, Agnoli A. Headache in the use and withdrawal of opiates and other associated substances of abuse. *Headache* 1991; 31:159–63.
- Diamond S, Dalessio DJ. Drug abuse in headache. In: Diamond S, Dalessio DJ editors. The practicing physician's approach to headache. Baltimore: Williams & Wilkins, 1982:114–21.
- Dichgans J, Diener. Clinical manifestations of excessive use of analgesic medication. In: Diener HC, Wilkinson M editors. Drug-induced headache. Berlin: Springer-Verlag, 1988:8–15.
- Dichgans J, Diener HD, Gerber WD et al. Analgetika-induzierter Dauerkopfschmerz. *Dtsch Med Wschr* 1984; 109:369–73.
- Diener HC. A personal view of the classification and definition of drug dependence headache. *Cephalalgia* 1993; 13:68–71.
- Diener HC, Dahlof CG. Headache associated with chronic use of substances. In: Olesen J, Tfelt-Hansen P, Welch KMA editors. The headaches. Philadelphia: Lippincott Williams & Wilkins, 1999:871–8.
- Diener HC, Dichgans J, Scholz E, Geiselhart S, Gerber WD, Bille A. Analgesic-induced chronic headache: long-term results of withdrawal therapy. *J Neurol* 1989; 236:9–14.
- Diener HC, Haab J, Peters C, Ried S, Dichgans J, Pilgrim A. Subcutaneous sumatriptan in the treatment of headache during withdrawal from drug-induced headache. *Headache* 1991; 31:205–9.
- Diener HC, Pfaffenrath V, Soyka D, Gerber WD. Therapie des medikamenten-induzierten Dauerkopfschmerzes. *Munch Med Wschr* 1992; 134:159–62.
- Diener HC, Tfelt-Hansen P. Headache associated with chronic use of substances. In: Olesen J, Tfelt-Hansen P, Welch KMA editors. The headaches. New York: Raven Press Ltd, 1993:721–7.
- Dige-Petersen H, Lassen NA, Noer J, Toennesen KH, Olesen J. Subclinical ergotism. *Lancet* 1977; i:65–6.
- Drucker P, Tepper S. Daily sumatriptan for detoxification from rebound. *Headache* 1998; 38:687–90.
- Dubach UC, Rosner B, Pfister E. Epidemiologic study of abuse of analgesics containing phenacetin. Renal morbidity and mortality 1968–1979. *N Engl J Med* 1983; 308:357–62.
- Elkind AH. Drug abuse in headache patients. *Clin J Pain* 1989; 5:111–20.
- Elkind AH. Drug abuse and headache. *Med Clin N Am* 1991; 75:717–32.
- Evers S, Gralow I, Bauer B, Suhr B, Buchheister A, Husstedt IW et al. Sumatriptan and ergotamine overuse and drug-induced headache: a clinicoepidemiologic study. *Clin Neuropharmacol* 1999; 22:201–6.
- Fanciullaci M, Alessandri M, Pietrini U, Briccolani-Bandini E, Beatrice S. Long-term ergotamine abuse: effect on adrenergically induced mydriasis. *Clin Pharm Ther* 1992; 51:302–7.
- Fincham JE. Over-the-counter drug use and misuse by the ambulatory elderly: a review of the literature. *J Ger Drug Ther* 1987; 1:3–21.
- Fincham RW, Perdue Z, Dunn VD. Bilateral focal cortical atrophy and chronic ergotamine abuse. *Neurology* 1985; 35:720–2.
- Fisher CM. Analgesic rebound headache refuted. *Headache* 1988; 28:666.
- Friedman AP, Brazil P, vonStorch TJ. Ergotamine tolerance in patients with migraine. *JAMA* 1955; 157:881–4.
- Gaist D, Hallas J, Sindrup SH, Gram LF. Is overuse of sumatriptan a problem? A population-based study. *Eur J Clin Pharmacol* 1996; 50:161–5.
- Gaist D, Tsiropoulos I, Sindrup SH, Hallas J, Rasmussen BK, Kragstrup J. Inappropriate use of sumatriptan: population based register and interview study. *Br J Med* 1998; 316:1352–3.
- Granello F, Farina S, Malferrari G, Manzoni GC. Drug abuse in chronic headache: a clinicoepidemiologic study. *Cephalalgia* 1987; 7:15–9.
- Gutzwiller F, Zemp E. Der Analgetikakonsum in der Bevölkerung und socioökonomische Aspekte des Analgetikaabusus. In: Mihatsch MJ editor. Das Analgetikasyn-drom. Stuttgart: Thieme, 1986:197–205.
- Hering R, Steiner TJ. Abrupt outpatient withdrawal from medication in analgesic-abusing migraineurs. *Lancet* 1991; 337:1442–3.
- Hokkanen E, Waltimo O, Kallanranta T. Toxic effects of ergotamine used for migraine. *Headache* 1978; 18:95–8.
- Horowski R, Ziegler A. Possible pharmacological mechanisms of chronic abuse of analgesics and other anti-migraine drugs. In: Diener HC, Wilkinson M editors. Drug-induced headache. Berlin: Springer-Verlag, 1988:95–104.
- Horton BT, Peters GA. Clinical manifestations of excessive use of ergotamine preparations and management of withdrawal effect: report of 52 cases. *Headache* 1963; 3:214–26.
- Isler H. Migraine treatment as a cause of chronic migraine. In: Rose FC editor. Advances in migraine research and therapy. New York: Raven Press, 1982:159–64.
- Jaffe JH. Drug addiction and drug abuse. In: Gilman AG, Rall TW, Nies AS, Taylor P editors. The pharmacological basis of therapeutics. New York: Pergamon Press, 1985:522–73.
- Katsarava Z, Fritsche G, Muessig M, Diener HC, Limmroth V. Clinical features of withdrawal headache following overuse of triptans and other headache drugs. *Neurology* 2001; 57:1694–8.
- Kaube H, May A, Diener HC, Pfaffenrath V. Sumatriptan misuse in daily chronic headache. *Br Med J* 1994; 308:1573.

- Kielholz P, Ladewig D. Probleme des medikamentenmi beta-brauches. *Schweiz Arztezeitung* 1981; 62:2866-9.
- Klapper JA. Rebound headache: definition, symptomatology, treatment, and prevention. *Headache Q* 1992; 3:398-402.
- Kouyanou K, Pither CE, Rabe-Hesketh S, Wessely S. A comparative study of iatrogenesis, medication abuse, and psychiatric morbidity in chronic pain patients with and without medically explained symptoms. *Pain* 1998; 76:417-26.
- Kudrow L. Paradoxical effects of frequent analgesic use. *Adv Neurol* 1982; 33:335-41.
- Lader M. Hypnotics and sedatives. In: DeWolff FA editor. *Handbook of clinical neurology*. New York: Elsevier Science, 1995:329-55.
- Lance F, Parkes C, Wilkinson M. Does analgesic abuse cause headache de novo? *Headache* 1988; 28:61-2.
- Lance JW. A concept of migraine and the search for the ideal headache drug. *Headache* 1990; 30:17-23.
- Limmroth V, Kazarawa S, Fritsche G, Diener HC. Headache after frequent use of new 5-HT agonists zolmitriptan and naratriptan. *Lancet* 1999; 353:378.
- Limmroth V, Katsarava Z, Fritsche G, Przywara S, Diener HC. Features of medication overuse headache following overuse of different acute headache drugs. *Neurology* 2002; 59:1011-4.
- Lucas RN, Falkowski W. Ergotamine and methysergide abuse in patients with migraine. *Br J Psychiatry* 1973; 122:199-203.
- Ludolph AC, Husstedt IW, Schlake HP, Grottemeyer KH, Brune GG. Chronic ergotamine abuse: evidence of functional impairment of long ascending spinal tracts. *Eur Neurol* 1988; 28:311-6.
- MacGregor EA, Vorah C, Wilkinson M. Analgesic use: a study of treatments used by patients for migraine prior to attending the City of London migraine clinic. *Headache* 1990; 30:634-8.
- Manzoni GC, Micieli G, Granella F, Sandrini G, Zanferrari C, Nappi G. Therapeutic approach to drug abuse in headache patients. In: Diener HC, Wilkinson M editors. *Drug-induced headache*. Berlin: Springer-Verlag, 1988:143-9.
- Marks V. Reactive (rebound) hypoglycemia. In: Marks V, Rose CF editors. *Hypoglycemia*. Oxford: Blackwell, 1981:179-217.
- Mathew NT. Amelioration of ergotamine withdrawal symptoms with naproxen. *Headache* 1987; 27:130-3.
- Mathew NT, Kurman R, Perez F. Drug induced refractory headache—clinical features and management. *Headache* 1990; 30:634-8.
- Michultka DM, Blanchard EB, Appelbaum KA, Jaccard J, Dentinger MP. The refractory headache patient—2. High medication consumption (analgesic rebound) headache. *Behav Res Ther* 1989; 27:411-20.
- Micieli G, Manzoni GC, Granella F, Martignoni E, Malferrari G, Nappi G. Clinical and epidemiological observations on drug abuse in headache patients. In: Diener HC, Wilkinson M editors. *Drug-induced headache*. Berlin: Springer-Verlag, 1988:20-8.
- Nicolodi M, DelBianco PL, Sicuteri F. The way to serotonergic use and abuse in migraine. *Int J Clin Pharmacol Res* 1997; 17:79-84.
- Page H. Rebound headache from ergotamine withdrawal. *JAMA* 1981; 246:719.
- Peters G, Horton BT. Headache: with special reference to the excessive use of ergotamine preparations and withdrawal effects. *Proc Mayo Clin* 1951; 26:153-61.
- Pini LA, Trenti T. Case report: does chronic use of sumatriptan induce dependence? *Headache* 1994; 34:600-1.
- Pradalier A, Dry S, Baron JF. Cephalée induite par l'abuse de tartrate d'ergotamine chez les migraineux. *Concours Méd* 1984; 106:106-10.
- Rahman A, Segasothy M, Samad SA, Zulfiqar A, Rani M. Analgesic use and chronic renal disease in patients with headache. *Headache* 1993; 33:442-5.
- Rapoport A, Stang P, Gutterman DL, Cady R, Markley H, Weeks R et al. Analgesic rebound headache in clinical practice: data from a physician survey. *Headache* 1996; 36:14-9.
- Rapoport AM. Analgesic rebound headache. *Headache* 1988; 28:662-5.
- Rapoport AM, Weeks RE. Characteristics and treatment of analgesic rebound headache. In: Diener HC, Wilkinson M editors. *Drug-induced headache*. Berlin: Springer-Verlag, 1988:162-7.
- Roswell AR, Neylan C, Wilkinson M. Ergotamine induced headache in migrainous patients. *Headache* 1973; 13:65-7.
- Sandler DP, Smith JC, Weinberg CR, Buckalew VM, Dennis VW, Blythe WB, Burgess WP. Analgesic use and chronic renal disease. *N Engl J Med* 1989; 320:1238-43.
- Saper JR. Drug abuse among headache patients. In: Saper JR editor. *Headache disorders*. Boston: PSG Publishers, 1983:263-78.
- Saper JR. Drug overuse among patients with headache. *Neurol Clin* 1983; 1:465-77.
- Saper JR. Daily chronic headaches. *Neurol Clin N Am* 1990; 8:891-902.
- Saper JR, Jones JM. Ergotamine tartrate dependency: features and possible mechanisms. *Clin Neuropharmacol* 1986; 9:244-56.
- Schnider P, Aull S, Baumgartner C et al. Long-term outcome of patients with headache and drug abuse after inpatient withdrawal: five-year followup. *Cephalalgia* 1996; 16:481-5.
- Schnider P, Aull S, Feucht M. Use and abuse of analgesics in tension-type headache. *Cephalalgia* 1994; 14:162-7.
- Schnider P, Maly J, Grunberger J, Aull S, Zeiler K, Wessely P. Improvement of decreased critical flicker frequency in headache patients with drug abuse after successful withdrawal. *Headache* 1995; 35:269-72.
- Schoenen J, Lenarduzzi P, Sianard-Gainko J. Chronic headaches associated with analgesics and/or ergotamine abuse: a clinical survey of 434 consecutive outpatients. In: Rose FD editor. *New advances in headache research*. London: Smith-Gordon, 1989: 29-43.
- Seller EM, Busto UE, Kaplan HL, Somer G, Baylon GJ. Comparative abuse liability of codeine and naratriptan. *Clin Pharmacol Ther* 1998; 63:121.
- Shakir RA. Vitamin toxicity. In: DeWolff FA editor. *Handbook of clinical neurology*, Vol. 65. New York: Elsevier Science, 1995:567-76.

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