Julio Pascual Carlos Leno

A woman with daily headaches

Received: 17 September 2004 Accepted in revised form: 13 January 2005

Published online: 8 April 2005

J. Pascual (☒) • C. Leno Service of Neurology, University Hospital Marqués de Valdecilla, Santander, Spain e-mail: juliopascual@telefonica.net Abstract Headache, and migraine in particular, is the main neurological reason for consultation. We present the case of a 48-year-old woman who experienced a transformation of her episodic migraine attacks into daily headache episodes due to the ingestion of biscuits containing wheat as their main ingredient. This experience empha-

sises that a good clinical interview remains the most important point in the diagnosis and management of headache.

Key words Headache · Migraine

Case report

This 48-year-old woman came to our clinic due to daily headache episodes. Except for a history of occasional idiopathic epileptic fits totally controlled in the last 16 years with phenobarbital, she was otherwise healthy. She referred to a history of rather infrequent, usually once every one to three months, headache episodes since child-hood. These episodes lasted between 12 and 24 hours and consisted of hemicraneal pulsating, moderate to severe pain, accompanied by photophobia, sonophobia, exercise intolerance, nausea and vomiting.

In October 1998 she began to suffer from almost daily headache attacks. These headache episodes usually started around midday, lasted until late evening (without treatment) and were indistinguishable from her previous headache attacks, except that she occasionally experienced some diarrhoea and abdominal pain. We could not relate this dramatic increase in headache frequency with any change in her lifestyle, medications or with the pres-

ence of psychiatric comorbidity. She was sent to our general neurological clinic in October 1999. Both neurological examination and brain MRI were normal. She was prescribed symptomatic treatment and given an appointment for a specialised headache consultation in our clinic in December 1999. In November 1999 she was free from headache for 4 days (Friday to Monday) for the first time in 13 months, even though she began to experience the same headache episodes from Tuesday morning. A few days later, the patient realised that during the days without headache she had not taken her diet biscuits at breakfast as she had forgotten to buy them in the supermarket on Friday. She recalled that she had begun consuming these biscuits more or less coinciding with the transformation of her episodic headaches into daily headaches. Thus, she spontaneously stopped taking these biscuits again and her daily headaches immediately disappeared with no other specific change in her diet. She had been eating "at least 8 or 10" of the so-called "digestive tasty wheat biscuits" every morning for breakfast from the beginning of her daily headaches. The ingredients of these biscuits include: enriched wheat flour (51%), whole wheat flour (11%), vegetable oils, sugar, raising agents (sodium bicarbonate and tartaric acid) and salt. General laboratory determinations, including antigliadin antibodies, were normal or negative. For the last 5 years of follow-up, the frequency of her headache episodes has returned to one every two to three months.

Discussion

Headache, and migraine in particular, is the main neurological reason for consultation. The headache attacks of this woman clearly met current operational criteria for migraine diagnosis [1]. Frequently underrated, migraine can be a devastating disorder, especially in the group of patients with frequent attacks destroying their quality of life [2]. Around 2% of the general population fulfil criteria for the so-called transformed or chronic migraine, which requires migrainous headache to be present at least 15 days per month [3]. Management of these patients is extremely difficult. They can benefit from preventive antimigraine drugs, but for most patients with frequent migraines treatment success depends on the identification of factors potentially transforming an episodic migraine into a chronic daily headache. Symptomatic medication overuse and psychopathology have classically been implicated in the development of this chronic condition and patients in whom medication overuse or psychiatric disorder are present usually benefit from abrupt analgesic withdrawal or from psychiatric treatment.

As exemplified by our patient, analgesic overuse and psychiatric disorders are absent in around one-third of migraine patients with severe and frequent attacks, which obliges us to look for other potential precipitating factors. Our patient clearly suffered from migraine attacks precipitated by the ingestion of biscuits containing wheat. This

experience emphasises that, in the technological era, a good clinical interview remains the most important point in the diagnosis and management of headache. The relationship between migraine and diet is controversial. Several foodstuffs, mainly cheese and chocolate, have classically been regarded as migraine triggers, but these dietary factors are not identified as consistent triggers by the majority of migraine sufferers. There are, however, migraine patients in whom dietary factors can be the main cause for increased frequency of the attacks and it is possible that there are migraine patients whose attacks could be precipitated by less popular food triggers. Wheat does not seem to be a relevant migraine precipitant according to most medical textbooks. It was, however, the most frequent (78% of the patients) trigger identified by Grant two decades ago [4], which seems to coincide with the personal experience of some long-standing migraineurs [5]. Migraine has been included within the diseases potentially secondary to food sensitivity [6]. The mechanisms of food sensitivity are not clear. It is a heterogeneous condition affecting different organ systems where allergy, pharmacological reactions, enzyme deficiencies and psychological cause have been hypothetically involved [6]. There have been some studies looking at the frequency of occult gluten sensitivity, as the main constituent of wheat, in migraine patients with very controversial results [7]. While Gasbarrini et al. [8] have reported occult coeliac disease in four out of 90 migraine patients, Schlesinger et al. [9] found no antigliadin antibodies, which were negative in our patient, in their group of 25 migraineurs.

In conclusion, this case shows that dietary factors should be specifically inquired into all migraine patients, particularly in those cases with frequent attacks and no evidence of analgesic abuse or psychiatric comorbidity.

Acknowledgements This work was supported by the "Centro de Investigación de Enfermedades Neurológicas", Nodo HUMV/UC, ISCIII, Spain.

References

- Headache Classification Subcommittee of the International Headache Society (2004) The International Classification of Headache Disorders, 2nd edn. Cephalalgia 24[Suppl 1]:1–160
- Menken M, Munsat TL, Toole JF (2000) The global burden of disease study. Arch Neurol 57:418–420
- Guitera V, Muñoz P, Castillo J, Pascual J (1999) Transformed migraine: a proposal for the modification of its diagnostic criteria based on recent epidemiological data. Cephalalgia 19:847–850
- 4. Grant EC (1979) Food allergies and migraine. Lancet 1:966–969
- Burks SL (1994) Managing your migraine. A migraine sufferer's practical guide. Humana Press Inc., Totowa
- Finn R (1992) Food allergy fact or fiction: a review. J R Soc Med 85:560–564
- 7. Wills AJ, Unsworth DJ (2002) The neurology of gluten sensitivity: separating the wheat from the chaff. Curr Opin Neurol 15:519–523
- 8. Gasbarrini A, Gabrielli M, Fiore G, Candelli M, Bartolozzi F, de Luca A et al (2000) Association between Helicobactor pylori cytotoxic type I CagA-positive strains and migraine with aura. Cephalalgia 20:561–565
- Schlesinger I, Hering R (1997)
 Antigliadin antibodies in migraine patients. Cephalalgia 17:712