

## LETTER TO THE EDITOR

### 'Hair-wash headache'—an unusual trigger for migraine in Indian patients

**K Ravishankar**

*The Headache and Migraine Clinic, Jaslok Hospital, Lilavati Hospital, Mumbai, India*

*Dear Sir* The article on 'bath-related headache' (BRH) by Mak et al. (1) makes interesting reading and is an excellent summary of all cases of this type of headache reported so far. We wish to place on record an unusual variant of this type of headache that is seen in Indian patients.

Mak et al. have rightly categorized BRH into Type 1 and Type 2. However the differences between these two types have not been specifically highlighted in the article. Analysis of their Table 1 suggests that Type 1 BRH is usually seen in female patients beyond age 45, and presents acutely to the emergency department (ED) with severe explosive thunderclap headache warranting exclusion of subarachnoid haemorrhage: the headaches are short-lasting (<4 h), almost always precipitated by hot water, there is no past history of headache, there is no photophobia or phonophobia and, most importantly, the link between the hot bath and headache remits spontaneously. In contrast to this, what they label as Type 2 BRH are the four cases reported by Mungen et al. (2). These patients had a past history of migraine or tension-type headache, they did not present to the ED with severe headache, none of them needed imaging studies to rule out other secondary headaches, they were more easily preventable and remitted after many years. Type 1 BRH has so far been reported exclusively from the Far East, whereas Type 2 has so far been reported only from Turkey.

As an extension to this unusual link between bath and primary headaches, we wish to report 'hair-wash' as an unusual trigger of migraine in Indian patients (3). It is important to mention here that most Indian ladies have long hair that is well-plaited and, since it is time-consuming to dry the long hair after a bath, many do not wet their hair whenever they have their daily bath. It is only on a holiday, when they have more time at their disposal or when there is a special occasion that they have a 'hair-wash', and this may be on 2–3 days of the week. It is also not common practice to use perfumes, shampoos or hair

dryers. With temperatures being high in most parts of the country for most months of the year, bathing in hot water as in cold countries is less common: it is usually lukewarm or cold water that is used.

On the days when they wash their hair, some patients complain within the following 10–15 min of a gradual build-up of a throbbing headache with accompaniments that fulfil the criteria for migraine without aura. There is a longstanding history of similar headaches, they have only one type of headache, and when they have what we allude to as 'hair-wash' headache (HWH) there are no other triggering factors that may be concurrently precipitating the headache.

This unusual trigger link is well recognized by patients to the point of their reducing the frequency of a 'hair-wash' or postponing it to the evening hours after office when they have more time. They uniformly comment 'On most days I have a body-bath and only on my free days do I have a body and head-bath!'. With prophylaxis for migraine this trigger link can be stabilized and many of our patients have gone back to an increased frequency of 'head-bath' while on maintenance prophylaxis. In some, these migraine headaches were preventable by episodic prophylaxis with naproxen sodium or ergotamine taken an hour prior to the 'hair-wash'.

Our patients in India would be categorized as Type 2 BRH with more similarities and only a few differences when compared with those reported from Turkey (2). Our patients fulfilled the criteria for migraine, their headaches were preventable and this trigger could be uncoupled with prophylaxis as for migraine. Based on comparative scrutiny, we would like to point out that 'bath-related headaches' should be analysed in depth and subdivided into 'acute thunderclap' or 'chronic migrainous', with the acute variety being precipitated by hot water, presenting periodically and remitting spontaneously, while the chronic variety may be precipitated by hot or cold water, presents recurrently and does not remit spontaneously but can be treated prophylactically.

The pathophysiological basis for this remarkable regional variation still defies explanation and has not been convincingly discussed in any of the articles on the subject. One can only conjecture at this stage whether it is due to a genetic or racial variation, whether it is the wet hair that triggers through temperature-sensitive receptors, or whether there is some form of persistent allodynia that manifests intermittently in some migraineurs. Through their article, Mak et al. have begun a search for an explanation as to why this type of primary headache has so far (i) not been reported from the West, (ii) has been reported as acute thunderclap from the Orient, and (iii) has been reported as recurrent migraine elsewhere. It would be stimulating to receive feedback from basic science researchers. Based on the presentation seen in our Indian patients, we would tend to agree with Mak et al. that the non-thunderclap variety of Type 2 BRH would eventually be

proven to be separate and more likely only an unusual trigger link for migraine. With more case reports from elsewhere there may be a need to limit the usage of the term 'bath-related headache' to just the thunderclap variety.

## References

- 1 Mak W, Tsang KL, Tsoi TH, Au Yeung KM, Chan KH, Cheng TS et al. Bath-related headache. *Cephalalgia* 2005; 25:191–8.
- 2 Müngen B, Bulut S. Hot bath-related headache: four cases with headaches occurring after taking a hot bath. *Cephalalgia* 2003; 23:846–9.
- 3 Ravishankar K. Unusual Indian migraine trigger factors. *Headache World* 2000. Poster Presentation. *Cephalalgia* 2000; 20:359.

*K Ravishankar, The Headache and Migraine Clinic, Jaslok Hospital and Research Centre, Bombay 400 026, India. Tel.: +91 22 2407 4257, fax +91 22 2407 1523, e-mail dr\_k\_ravishankar@vsnl.com*