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BASH NEWSLETTER

www.bash.org.uk

BASH was formed in 1992 with the aim of working with other organisations to relieve the burden of headache sufferers. It is a member of the International Headache Society and affiliated to Headache UK, an umbrella organisation of all bodies working in headache in the UK. It welcomes healthcare professionals of all disciplines who are interested in headache.

Last year a new category of Associate Member was introduced. For the reduced fee of £10 a year, an Associate Member receives the advantages of BASH membership but without membership of the International Headache Society or receiving *Cephalalgia* the journal of headache. Advantages include emailed monthly abstracts from the leading journals of *Cephalalgia* and *Headache,* the BASH newsletter and opportunities to take part in other BASH activities including teaching and research. This is the first of our newsletters and for each one there will be a different editor giving each edition a different flavour. More information about BASH and how to join can be found on our website www.bash.org.uk

BASH has developed extensive guidelines on headache management and this year we intend to produce guidelines on imaging for primary care and the use of oxygen in cluster headache. As BASH guidelines are being increasingly used by NHS joint formularies, we are publishing a standard joint formulary framework for migraine that local NHS Trusts can tailor to their local requirements. A number of research initiatives are also underway.

Current policy initiatives focus on a patient led NHS driven by competition between service providers. During this time of reorganisation and uncertainty, it is important that headache services are not further fragmented by short- term considerations. BASH emphasises the importance of close working between the primary and secondary care sectors. This year for the first time, a Chair has been appointed from primary care.

In this edition:

This edition's editor

David Kernick is a general practitioner in Exeter. He leads the Exeter PCT Intermediate Care Headache Clinic and is Chairman of BASH

Migraine Intervention Updates

There have been few developments on the acute treatment side. Triptans may become available directly from pharmacists in the near future although no details are available. This together with the impending expiry of the Imigran license could see interesting changes in the Triptan market.

In 2005 Topiramate (Topamax©) obtained a license for use in the prevention of migraine. Topiramate is a neuro modulatory compound with stabilising properties. Three randomised controlled trials have reported which have demonstrated reduction in headache frequency of 50% and improvements in quality of life measures. A dose of 50mg bd a day reflects the best efficacy–adverse event balance with patients titrating upwards from an initial starting dose of 25mg a day. Frequent reversible side effects that lead to discontinuation are parasthesia, difficulty in concentration and cognitive function, nausea and fatigue. Topiramate can be associated with weight loss which some patients may find beneficial.

March saw the results of the eagerly awaited randomised controlled trial determining the impact of Patent Foramen Ovale closure on migraine with aura. Studies have demonstrated an increased prevalence of PFO shunts in migraine with aura. Closure on young stroke patients and divers with decompression symptoms have shown a co-incidental reduction in migraine with aura. The MIST study (www.mist-migraine.org) was a randomised controlled trial where control patients received a sham intervention. The trial missed its main outcome measure - following a three month healing period, there was no difference in migraine cessation in both arms. There was a modest but significant difference in the reduction of the number of hours with migraine of 37% in the intervention group compared with 17% in the control group. Longer term follow up and larger studies are underway but on the basis of current evidence, the cost and risks of this intervention are not commensurate with the small benefits that have been shown. Formal commentary on this trial can be found on the BASH website — www.bash.org.uk

Oxygen and Cluster Headache

Although subcutaneous Sumatriptan is the goal standard for acute treatment of cluster headache, oxygen inhalation is the preferred alternative for recurrent attacks. The effect of oxygen was first discovered over fifty years ago but its mode of action is not understood. Although blinded randomised studies have yet to report, clinical experience suggests that oxygen is safe and effective.

To achieve a satisfactory clinical outcome, 100% oxygen must be administered. This standard can only be obtained with a high flow rate of oxygen i.e. between 10 and 12 litres a minute and a mask that has a reservoir bag and a non re-breathing escape value. Few physicians have been aware of this criterion or the means for delivering it resulting in many sufferers receiving sub-therapeutic oxygen concentrations. The problem has been compounded by the exclusion of appropriate equipment within the NHS therapeutic tariff.

February 2006 saw the restructuring of NHS oxygen supply in England and Wales removing pharmacies from the supply chain. Oxygen is now delivered at the required specification directly from a nominated contractor who will also provide relevant training for the patient on the receipt of a doctor's order form (home oxygen order). Every cylinder will have an integral headset appropriate for the patient's requirements and a mask that will deliver the required concentration of oxygen. Interim guidelines for Oxygen therapy issued by the British Association for the Study of Headache have been published and are outlined below.

If patients or physicians still have queries then the patient support group - the Organisation for the Understanding of Cluster Headache (www.clusterheadache.org) is a valuable resource.

Interim BASH Guidelines for Oxygen in Cluster headache

1. Although the results from placebo-controlled trials are awaited, oxygen provides an effective and safe treatment for cluster headache. The mechanism of its action is unknown.
2. 100% oxygen is required for a therapeutic effect. Ordering physicians should specify:
   i) A delivery of 10 litres per minute, a non-breathable mask and short burst delivery to provide 100% oxygen.
   ii) A static cylinder. This will provide up to 200 minutes supply depending on the cylinder pressure supplied.
   iii) For portable use, an ambulatory cylinder can be ordered providing up to 40 minutes supply.
3. Oxygen should be inhaled for 10 to 20 minutes depending on the clinical response.
4. Oxygen therapy should not be used in patients who have chronic pulmonary obstructive disease. For other co-existing pulmonary conditions where 100% oxygen may be harmful, advice should be taken from a respiratory physician.
5. Patients should be made aware of the dangers of continuing to smoke in the presence of oxygen therapy. The majority of cluster patients are smokers at presentation and smoking cessation advice should be given.
6. Patients should be reassessed at least annually. Preventative medication should be considered for patients who are frequent users of oxygen.

BASH Headache Teaching Weekend 2006

This residential course is organised by the North Midlands Headache Clinic in conjunction with BASH. It is aimed at neurology trainees and GPs with an interest in headache but is open to all who wish to attend. The residential course takes place at the University of Keele between 16-18 June 2006. The intensive teaching course aims to address the practical modern management of headache disorders in an interactive environment highlighting recent advances. Course application forms and further details can be found on the BASH website www.bash.org

BASH Membership

Full membership — £125 per year

This includes membership of IHS, voting rights and the monthly journal *Cephalalgia* as well as the advantages outlined below

Associate Membership - £10 per year

This includes the BASH newsletter, monthly email updates of abstracts from *Cephalalgia* and *Headache* , notification of BASH research and education activities

Details of how to join can be found on www.bash.org.uk

Forthcoming Meetings

Oxford Symposium on Headache
30 June—1 July 2006
Contact Chris Fursdon Davis
dr.fursdondavis@orh.nhs.uk

The Migraine Trust International Symposium
18-20 September 2006
More details can be found on www.migrainetrust.org

University of Keele

Improving Headache Care—are GPs with a special interest the answer?

All health systems are seeking ways of reconfiguring their services to provide care more effectively and efficiently. Most patients with headache can be treated in general practice where there is the potential to address the complex combinations of physical and psychosocial factors. However, headache is not well managed in primary care. The reasons for this are not well understood but poor patient expectation, limited physician experience and lack of empathy or misdiagnosis have been suggested as possibilities

One option is to delivery services from general practitioners with a special interest GPwSI - a GP who has developed enhanced skills so as to provide extended services hat have traditionally been provided in secondary care. Guidelines are being developed by the Royal College of General Practitioners in consultation with other key stakeholders, defining the competencies required and governance arrangements. (www.doh.gov.uk/pricare/gp-specialinterest). A working party of the British Association for the Study of Headache has recommended the establishment of intermediate care headache centres to support GPs who continue to provide first-line headache services for their patients. Specialist secondary-care centres should provide additional services and support to these two levels.

Unfortunately there are only a handful of intermediate care clinics in the UK. The Exeter Primary Care Trust clinic (www.headache.nhs.org) started in 2001. Approximately 200 patients are seen each year. Average HIT scores of 69.4 and MIDAS of 35 at first appointment demonstrate high levels of morbidity.

Although the concept of the GPwSI is being developed across NHS in a wide range of clinical areas, evidence of effectiveness and cost effectiveness is still awaited. A major concern is that in the current environment of patient choice and competition, intermediate care may undermine relationships between primary and secondary care and destabilise local health economies.

Some advantages claimed for general practitioners with a special interest

- Care is delivered closer to the patient's home
- Care can be provided more cost effectively
- Access to GP surgeries is often easier than hospitals
- Provides opportunities for professional development of general practitioners
- Hospital specialists are freed up to deal with more complex cases

BASH Guidance for Imaging with Isolated Headache Presentation in Primary Care

This guidance will shortly be available on the website. The paper reviews current evidence and offers pragmatic suggestions to help GPs in this difficult area. Key points are:

- The incidence of isolated headache (no other signs or symptoms) in patients with a cerebral tumour is approximately 10%.
- 3% of GP consultations are for headache. In this population the risk of serious pathology is approximately 0.06%.
- 30% of neurological consultations are for headache where the risk of serious pathology is approximately 0.8%.
- MRI is the investigation of choice but approximately 1.7% of cases will show incidental findings.
- A 4% risk would be a suitable level to investigate isolated headache. The best estimate is that this represents a population who have headache for at least 10 weeks in whom a diagnosis of a primary headache cannot be made.

Due to the limited evidence base, these figures represent best estimates that are currently available.

With the onset of primary care commissioning, pragmatic guidance is needed for imaging isolated headache in general practice

Spontaneous Intracranial Hypotension (SIH) - A brief guide to diagnosis and management. Stuart Weatherby

Loss of CSF volume best explains the syndrome often designated 'low-pressure headache' although CSF pressures may not always be low. This implies there may be significant individual variation in CSF pressures, and also that that the rate of CSF loss may be more important in producing the syndrome than the residual CSF pressure or volume. Two main theories have been proposed to explain the cause of head-

(Continued on page 4)

Spontaneous intracranial hypotension (continued from page 3)

ache; traction on pain sensitive structures, and dilation of pain sensitive intracranial vascular structures.

The onset of headache following SIH may be gradual or sub acute but a thunderclap form is also well recognised. As SIH becomes chronic, the postural aspect of the headache may become much less apparent, and an index event may not be recalled. SIH should therefore be considered in the differential diagnosis of new onset persistent daily headache. SIH may thus present as new onset persistent daily headache rather than as an orthostatic headache.

Investigation of patients with suspected SIH may help corroborate the diagnosis and identify the site of CSF leakage and include magnetic resonance, radionucleotide cisternography and CT myelography

Symptoms may settle with bed rest. If not intravenous caffeine at a dose of 500 mg in 500 ml saline over two hours (repeated once or twice) is often used although the evidence base is limited. Epidural blood patching is used if bed rest and/or medical treatment is unsuccessful.

Key points

- Not all patients with spontaneous intracranial hypotension have low CSF pressure
- SIH can present to the physician as a chronic headache (new onset persistent daily headache) and over time the postural features can become less clear-cut. Always go back to the headache phenotype at headache onset when taking the history.
- There is emerging evidence to suggest that 'blind' blood patching may be effective in managing the condition.
- Spontaneous intracranial hypotension (SIH) produces a headache similar to a post lumbar puncture headache.
- For an expanded version of this article see www.peninsula-headache.nhs.uk

Stuart Weatherby is a consultant neurologist in Plymouth

Update from International Headache Society Congress Japan 2006 - Nicola Giffin

Why travel to Japan when you can read the conference abstracts in Cephalalgia? Nothing can beat the face to face interaction with opinion leaders and those at the cutting edge of research in their chosen field to get the true 'feel' of advances in a specialist field. An update from the horse's mouth of international expertise can be just what is needed to inspire one to further the cause of the headache sufferer.

The content of this year's presentations appeared exceptionally high compared to previous conferences perhaps because of a wider awareness of the global burden of headache or increased sophistication of research methods in fields such as functional imaging and genetics. Whatever the reason, there was a plethora of fascinating and practice-changing platform and poster sessions to inspire the clinician and scientist.

The notable highlights of the conference for me were genetics advances from Ferrari's group; Burstein's presentation on central sensitization and functional imaging data from London and Toulouse.

Michel Ferraris group in Leiden, world leaders in the genetics of migraine, now have a mouse model of a particularly severe phenotype of FHM in which affected individuals with a CACNA1A mutation gene have devastating (sometimes fatal) cerebral oedema after relatively mild head injury. They have shown that these mice are ataxic and 50% of offspring die suddenly in infancy. This is of concern to those of us who are involved in the management of families carrying similar mutation but still is a long way from a proven prophylactic treatment for family members.

Rami Burstein, professor from Harvard medical school, is an international expert on central sensitization and migraine. He emphasised that during the initial phase of migraine only the first division of the trigeminal nerve is 'sensitized' (by neurogenic inflammation and vessel dilatation), manifesting as allodynia just in the ipsilateral Vi dermatome. As the trigeminal nucleus caudalis becomes sensitized patients may experience allodynia in other V dermatomes. Moreover, if the migraine persists and the thalamus becomes sensitized some patients experience whole body allodynia. He proposes that this central sensitization is often why acute treatment fails. Acute treatment is far more successful if taken when the headache is still mild and there is no allodynia outside the ipsilateral Vi dermatome. It is always satisfying to hear of a scientific rationale to back up the message we hear from patients. Jan Brandes from Alabama went on to show that a combination of sumatriptan and naproxen taken together is far more effective than either taken individually, possibly by the triptan tackling the trigeminal pathway and the NSAID tackling central senstization.

The functional imaging data on primary headaches becomes more convincing year on year as the same themes of brainstem dysfunction are reiterated. Even those who may have been slightly sceptical of early imaging data cannot now deny the weight of evidence in favour of disturbance of hypothalamic and brainstem function in primary headaches.

The Migraine Trust conference will be held 18-20th Sept 2006 at Kensington Town Hall, and the next IHS conference is 28th June - 1st July 2007 in Stockholm. I have every expectation that these will be just as inspiring.

Nicola Giffin is a consultant neurologist in Bath