

EHF News 16

Heading in the Right Direction

Strategic objectives

Introduction

As Europe adapts to changes in health care systems and access to treatments, and to other political and environmental influences, the European Headache Federation (EHF) is reassessing its role and responsibilities.

In seeking to do this effectively, EHF sought input from pharmaceutical sponsors and the media during Headache World 2000. In the light of this feedback, EHF has been reviewing its strategy and activities for the next few years.

An Integrated Strategy for EHF

Since its foundation in 1992, EHF, a non-profit organisation, has sought to improve life for those affected by headache in Europe. To do so, EHF dedicates its efforts to improving awareness of headache disorders and their impact amongst governments, health care providers and consumers across Europe. Within its federal structure, EHF supports national headache societies with a specific focus on Eastern European countries.

Meeting in Amsterdam on October 13th, the new EHF Executive Board reaffirmed its objective of improving care of headache sufferers in Europe. An integrated strategy divided into two levels was agreed upon in order to achieve this goal:

1. To educate Europe about headache through the teaching of key players such as young doctors and all those involved in headache management about the seriousness of headache disorders;
2. To influence decisions in the headache field through:
3. Establishing EHF as the single voice of headache in Europe;
4. Lobbying of governments for appropriate resourcing of headache services and improved access to care;
5. Promoting the appropriate organisation of headache services, including headache clinics, relevant clinical research and national headache societies with appropriate objectives, structures and activities etc. in its member states.

Ultimately, to create the optimal environment for headache sufferers and carers across all Europe, to ensure more headache sufferers have access to appropriate treatment and therefore enjoy a better quality of life.

The European Scope

The 'Europe' that EHF refers to encompasses:

- all countries on the European continent from the Nordic Region to the Mediterranean, and all countries holding themselves to be European;
- all EU countries;
- Eastern Europe, including the former Soviet Union countries.

Partnerships

EHF recognises the importance of successful partnerships in order to ensure that, ultimately, the lives of those affected by headache in Europe are improved. Through its federal structure, EHF already has committed support from its national members who, joined together under the umbrella of EHF, have a stronger voice in Europe.

However, EHF appreciates the need for further partnerships and stronger links with other third parties involved in headache and migraine management in Europe. To this end, EHF is meeting with representatives from the pharmaceutical companies involved in headache and migraine management to establish whether there are opportunities for joint activities that would ultimately meet the shared objectives of improving access to care by those affected by headache. In addition, EHF will endeavour to work closely with the World Health Organization, World Headache Alliance and International Headache Society, to share and represent these organisation's European objectives locally.

Implementing the EHF Strategy

EHF is currently considering the implementation of the following activities in support of its strategy:

1. To educate Europe about headache

Holding Summer Schools

Residential training on headache for young doctors who may be interested in headache as speciality;

Normally lasting four-five days, with an intensive programme presented by a faculty of up to 20 leading experts in the field;

Providing up to date education and training.

Providing templates for national EHF members to run regional educational seminars on a regular basis

Based on Summer Schools' Programme.

Adapted to regional needs.

Running a biennial EHF Congress

Delivering high-level educational seminars closely related to EHF's objective;

Encouraging the meeting of minds;

Providing platform for presentation of latest therapeutic developments;

Thereby increasing the pool of educated specialists and ensuring latest data are accessible to them, continuing their medical education and leading to better care for those affected by headache in Europe.

2. To become a key influencer in the headache field

- Establishing EHF as the single voice of headache in Europe

Representing all member Societies in Europe;

Ensuring communication of consistent messages about headache;

Maintaining unique status through the activities listed under each level of the strategy;

Providing EHF members with recommendations to achieve consistency of care for those

affected by headache in Europe.

Lobbying governments and health education providers

Working in partnership with WHA members ("patient pull") to ensure EHF members provide "scientific push" to governments;

Building on WHO's headache epidemiology data, once collated:

Providing EHF members with tools necessary for them to lobby national governments and ensure headache is recognised as a serious condition;

Pushing for establishment of national "headache czars";

Working with the EU's Health and Consumer Protection Directorate General to ensure headache is recognised as a serious condition on a European level;

Ultimately, ensuring a high political level of endorsement to generate better care and access to treatment for those affected by headache across Europe.

Providing EHF members with the tools to lobby leading teaching hospitals and universities:

To put headache and migraine on the medical curriculum;

Possibly to establish headache education centres of excellence and Professorships;

Thereby ensuring optimal access to education and information about headache and migraine by training doctors, to provide consistent and optimal care for those affected by headache across Europe.

Promoting the appropriate organisation of headache services, including headache clinics, relevant clinical research, national headache societies etc. in its member states

Providing EHF members with evaluation templates for their national headache services (such as headache clinics, access to treatment, follow-up, etc.);

Working in partnership with local EHF members to develop case studies, compare and contrast, and provide guidance on best approach;

Providing the tools necessary to implement and manage national headache societies, and working with national individuals who can take the initiative forward;

In those countries where national societies already exist, to provide guidelines on best practice to ensure consistency of activity and messages throughout Europe;

Developing a white paper / model on best approach to headache services, for distribution to national health services across Europe;

Following on from white paper, working with local EHF members to ensure best approach is implemented across Europe;

Ultimately, to ensure national health services provide optimal solutions to headache sufferers, thereby relieving the personal, social and economic burden of headache across Europe.

BACK FROM LONDON

Introduction

Headache 2000, a headache conference co-sponsored for the first time by the World Health Organization, was attended approximately by 2500 doctors from 60 countries covering all continent and 150 headache patients. This meeting was organized by Dr. T. Steiner, chairman of the organizing committee and Prof. Goadsby, chairman of the scientific committee. Headache 2000 incorporated the following organizations: International Headache Society, European Headache

Federation, Migraine Trust, American Headache Society and World Headache Alliance. At this meeting the current thinking and advances in the diagnosis, prevention and treatment of headache disorders were discussed; particular interest has been focused on Neuroimaging, the impact of genetics, headache in children and adolescents, cluster headache. Out of 415 abstracts presented 82 were selected for oral presentation; 98 speakers. This arrangement lent itself to free and valuable discussion. One satellite symposia each day was supported by pharmaceutical companies. For the first time, headache sufferers are being invited to participate in a major scientific conference with many of the world's leading experts in headache disorders. At this purpose a parallel public programme included sessions on headache at school, headache and hormone, coping with headache and a career, conventional and non-conventional therapies for headache and migraine.

Genetics

M. Ferrari (Leiden University, The Netherlands) reported on the different types of mutation in the brain specific subunit gene (CACNA1A) on chromosome 19p13 that is involved in three human disorders: familial hemiplegic migraine; episodic ataxia type 2, chronic spinocerebellar ataxia type 6. In addition evidence is accumulating that the same gene is also involved in the common forms of migraine with and without aura. P. Montagna (University of Bologna, Italy) discussed the possible association that have been reported between dopamine receptor D2 and migraine in some studies but denied in others. No significant genetic association was found between dopamine receptors and genes, thus excluding a dopamine metabolism gene involvement in migraine susceptibility. The factor XIII Val 34 Leu mutation associated with increased factor XIII specific activity has been suggested by JA Iniesta (Hospital general Universitario, Murcia, Spain). The increase of this factor could be considered as a mild genetic risk factor for the development of cerebrovascular disorders.

Pharmacology acute;

The use of a combination of ibuprofen lysine and domperidone in the treatment of migraine has been presented by J. Cottrell (Johnson & Johnson, High Wycombe). The results from a double-blind study on 381 patients showed a benefit, in terms of 1 hour relief and global evaluation, from the combination possibly linked to a fasted analgesic response. Ketamine successfully improved the aura in patients with hemiplegic migraine according to the study presented by H. Kaube (Institute of Neurology, Queen Square, London) but was ineffective in the subsequent migraine headache. This finding provided further evidence that headache pathophysiology may be independent of the aura. The suppression effect of eltriptan, a new triptan, on the activation of trigeminovascular sensory neurons by glyceryl trinitrate (GNT) was presented by A.S. Zagami (The Prince Henry and Prince of Wales Hospitals, University of New South Wales, Australia). The results on cats showed that GNT activate craniovascular sensory pathways at a site at, or peripheral to, the second-order neurons and such an activation may account for at least the acute onset headache induced by GNT. Moreover, the antimigraine agent eltriptan is able to selectively suppress noxious sensory information from the dura, induced by GNT, via an action at 5HT_{1B/1D} receptors.

Pharmacology prophylactic

R.J. Storer (Queen Square Hospital, London, UK) provided evidence in cat that GABA modulates nociceptive input to the trigeminocervical complex mainly through GABA_A receptors. GABA_A receptors may provide a target for the development of new therapeutic agents for primary headache disorders. The efficacy and safety of a once-daily use of valproate slow release in migraine without aura was emphasized by S.D. Silberstein (Thomas Jefferson University, Philadelphia, PA) who explained this increased tolerance as probably related to the reduced C_{max} of the slow release formulation. A controlled study using 500 mg of acetazolamide in migraine patients, was presented by K. Vahedi (Hopital Lariboisiere, Paris, France). Patients generally showed an improvement on frequency and duration of headache, even the number of drop out due to side effects like fatigue and paresthesias was relevant.

Pathophysiology

Goadsby (Institute of Neurology, London, UK) provided an elegant review of neuroimaging in headache since they offers both a biological marker and insights in the pathophysiology of primary headache. The modern neuroimaging using positron emission tomography (PET) and perfusion weighted MRI demonstrated a reduction in brain blood flow that took place with migraine aura. PET studies have also shown an area of characteristic activation in the rostral brainstem in migraine and in the posterior hypothalamic gray matter in cluster headache. The wavefront through human cortex using magnetoencephalography described by Bowyer (Henry Ford Hospital, Detroit and University of Kansas City, USA) showed that large areas of multiple activated pattern waxing and waning across the occipital cortex were typical of migraine patients and were not found in control subjects.

Since the nitric oxide release has been implicated in migraine pathophysiology, S.J. Read et al, (Smithkline Beecham, Harlow, UK) showed the positive experimental evidence of SB-220453, a novel compound inhibiting the nitric oxide release associated with Spreading Depression in cat.

Paediatric

D.N.K. Symon (General Hospital, Hartlepool, UK) reviewed the importance of prophylactic treatment of paediatric headache. The drugs most widely used include pizotifene in UK, cyproheptadine in USA and beta-blocker in the Nordic countries.

R Pothman (Evangelical Hospital, Oberhausen, Germany) presented the results of a double-blind, crossover study of flupirtine (Astra-Zeneca) and paracetamol in 30 children in the acute treatment of episodic tension-type headache. Flupirtine has shown a convincing clinical effect in acute-tension type headache but no statistical difference was noticed between the two treatments. R. Hering (Meir General Hospital, Sackler Faculty of Medicine, Tel Aviv, Israel) reported on the presence of caffeine-induced headache in children and adolescents with high daily use of cola; the need of gradual withdrawal from caffeine is mandatory for a complete disappearance of induced chronic daily headache.

Cluster headache

A local retro-orbital vascular inflammation is one of the mechanisms behind cluster headache. Using the SPECT H. Gobel (Christian-Albrechts-University, Kiel, Germany) suggested that a localized ipsilateral retro-orbital vascular inflammation

with Plasma Extravasation in the basal venous vessels of the skull is associated with an active period of cluster headache attacks. A successful treatment with corticosteroids or verapamil blocks both ipsilateral plasma extravasation and cluster attacks. The findings obtained using cortical auditory evoked potentials by J Afra et al. (Simmelweis University, Budapest, Hungary) and somatosensory trigeminal evoked potentials by A. Frese (University of Munster, Germany) are in favour of a central dysfunction for the pathogenesis of cluster headache. Comparing the clinical picture of typical and atypical cluster headache patients P. Torelli (University of Parma, Italy) presented evidence for reviewing

the current diagnostic criteria of IHS suggesting the inclusion of restlessness and pain located also in frontal-occipital area. Twenty-five years after the first description of chronic paroxysmal hemicrania, any further description of large patient series as in that of C. Boes (Mayo Clinic, Rochester, MN) confirm the importance of the indomethacin response (Indotest) as the sine qua non criteria for the diagnosis

Pain and Head pain

The topic of nitric oxide (NO) in primary headache has been addressed in the lecture given by J. Olesen (Glostrup Hospital, University of Copenhagen, Denmark). NO is a transmitter substance formed from L-arginine and it exerts its action locally by chemical reactions such as the formation of free radicals and the formation of cGMP. The action of glyceryl trinitrate (GTN) is exclusively a prodrug which releases NO in various tissues. The studies of headache induction with GTN in migraine, tension type and cluster headache have shown that NO is the only transmitter that can cause a headache in a given patient. It has been shown experimentally that inhibition of nitric oxide synthase has a positive effect on migraine and tension-type attack.

Chronic daily headache/tension-type headache

An elevated gliaprotein S-100 level in mild traumatic brain injury considered as an early marker for the postconcussional complaints has been studied by R. Jensen (Glostrup Hospital, University of Copenhagen, Denmark). The results obtained did not indicate any relation between the S-100 and the acute chronic post-traumatic headache. J.A. Klapper (Colorado Neurology & Headache Center, Denver, CO) provided evidence that botulinum toxin type A was safe for treatment of chronic daily headache and reduced frequency and severity compared to placebo. According to Z. Katsarava (University Hospital Essen, Germany) all triptans are able to cause drug-induced headache. Moreover, the critical mean monthly dosage/intake frequency, as well as the critical mean duration necessary to provoke a drug-induced headache, are lower and shorter than with analgesics or ergotamine.

Satellite symposia on treatment.

There is no doubt that the emergence of the triptan class in the early 1990s dramatically advanced the treatment of migraine. At the start of a new decade, and with considerable research and clinical experience to draw on, it has become clear where improvements in the pharmacokinetics parameters and clinical effectiveness of the class can benefit patients. All the currently available triptans (sumatriptan, zolmitriptan, naratriptan, rizatriptan, almotriptan, eletriptan, frovatriptan) seem to have comparable efficacy with response rates at two hours for oral formulation typically in the region of 50-80%, and pain free rates at two hours of around 20-50%. Headache recurrence within 24 hours of administration, following an initial response, typically occurs in 24-45% of patients with most triptans. The incidence of chest symptoms is low (<4% at utmost). Clinical studies agreed that a symptomatic treatment meets the individual needs of a patient at 2 hours is:

pain free, able to function normally, free of migraine symptoms, completely or very satisfied. After some decades new perspective are forthcoming with the use of antiepileptic drug in the prophylaxis of migraine. This is the case of topiramate, valproate, gabapentin and lamotrigine that have been used recently in the treatment of high frequency migraine, chronic daily headache and chronic cluster headache.

In conclusion This was an excellent, well organized meeting. Although drug treatment is not a major theme at the international headache congresses, several of the presentations focused on the drug aspects in the pathogenesis and treatment of headache. Indeed, some of the contributions summarized the safety and the efficacy of the triptans in the treatment of migraine. The new category of antiepileptic drugs gabapentin, topiramate, valproate and lamotrigine seems also to be promising in the prophylactic treatment of migraine. News interesting clinical features of primary headaches were provided with the aim to help the ongoing revision of the 1988 diagnostic criteria of headache.

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