

Headache Clinics: Organization, Patients and Treatment

EDITED BY

Rigmor Jensen

*Danish Headache Centre, Department of Neurology,
Glostrup Hospital, University of Copenhagen,
Glostrup, Denmark*

Hans-Christoph Diener

*Chairman and Professor,
Department of Neurology,
University of Duisburg—Essen, Germany*

and

Jes Olesen

*Danish Headache Centre, Department of Neurology,
Glostrup Hospital, University of Copenhagen,
Glostrup, Denmark*

OXFORD
UNIVERSITY PRESS

Contents

Preface	v
Acknowledgement	vii
Contributors	xiii

Session I Classification and organization of headache clinics

1	The epidemiology and cost of severe headache disorders <i>Lars Jacob Stovner</i>	3
2	Should an acute headache service be part of a headache clinic? <i>Anne Ducros</i>	9
3	A multidisciplinary academic headache centre in the United States <i>Stephen D. Silberstein, Cheryl Gebeline-Myers, Kathleen C. Bradley, William B. Young, Avi Ashkenazi, Noah Rosen, Mary Hopkins, and Patrice Guild</i>	19
4	Organization of a multidisciplinary headache centre in Europe <i>Rigmor Jensen</i>	29
5	Approach to headache management: USA, UK, and India compared <i>K. Ravishankar</i>	35
6	Organization of a headache centre: an Indian perspective <i>K. Ravishankar</i>	39
7	Establishment and organization of a research headache clinic: advantages and disadvantages <i>Michael Bjørn Russell, Kjersti Aaseth, Ragnhild Berling Grande, Pål Gulbrandsen, and Christofer Lundqvist</i>	43
8	Favourable results in a migraine clinic: objectives and background <i>Gregorio Zlotnik</i>	46
9	A local network as a 'headache clinic' in the French Alps <i>G�rard Mick, Sabine Renaud, Jean-Pierre Ramponneau, Jean-Fran�ois Reynes, Claudy Bodin, Karine Perronnier-Gros, Yolande Traversa, Philippe Bocquet, Laurent Tollet, Xavier Baron, and Xavier Buffet Croix-Blanche</i>	49
10	Discussion summary: Classification and organization of headache clinics <i>Stefan Evers</i>	53

Session II Patient characteristics in headache clinics

11	Characteristics of patients in headache centres <i>Hartmut G�bel, Axel Heinze, Katja Heinze-Kuhn, Andrea Roth, and Hans-Heinrich R�schmann</i>	59
----	---	----

- Motallebzadeh, Tina** Institute of Neuroscience and Physiology, Sahlgrenska University Hospital and Gothenburg Migraine Clinic, Sociala Huset, Uppg D 41117 Göteborg, Sweden
- Nachit-Ouinekh, F.** Laboratoire GlaxoSmithKline, Marly le Roi, France
- Nappi, G.** Headache Unit and University Centre for Adaptive Disorders and Headache (UCADH), IRCCS 'C. Mondino Institute of Neurology' Foundation, Pavia, Italy and Department of Neurology and Otolaryngology, 'La Sapienza', Rome, Italy
- Nappi, Giuseppe** University Centre for Adaptive Disorders and Headache (UCADH), IRCCS C. Mondino Foundation Institute of Neurology, Pavia, University 'La Sapienza' Rome, Italy
- Nappi, Rossella E.** Department of Obstetrics and Gynaecology, IRCCS 'Policlinico S. Matteo', University of Pavia and University Centre for Adaptive Disorders and Headache (UCADH), Italy
- Nilsen, Kristian Bernhard** Department of Neuroscience, Norwegian University of Technology and Science, and Department of Neurology and Clinical Neurophysiology, St Olavs Hospital, Trondheim, Norway
- Olesen, Jes** Department of Neurology and Danish Headache Center, University of Copenhagen, Glostrup Hospital, Ndr. Ringvej, 2600 Glostrup, Denmark
- Pagani, M.** Consorzio di Bioingegneria Informatica Medica (CBIM) Pavia, Italy
- Pascual, Julio** Hospital Clinico Universitario, Salamanca, Spain
- Perronnier-Gros, Karine** Pain Network, Hopital Pierre BAZIN, Route des Gorges, 38500 Voiron, France
- Pradalier, A.** Hopital Louis Mourier, 178, 92701, Colombes, France
- Radat, F.** UTDC, CHRU Pellegrin Tripode, Bordeaux, France
- Ramadan, Nabih** Rosalind Franklin University of Medicine and Science, 3333 Green Bay Road, North Chicago, IL 60064, USA
- Ramponneau, Jean-Pierre** Pain Network, Hopital Pierre BAZIN, Route des Gorges, 38500 Voiron, France
- Ravishankar, K.** The Headache and Migraine Clinic, Jaslok and Lilavati Hospitals, Mumbai, India
- Rechter, Helle Søberg** Danish Headache Center, Department of neurology, University of Copenhagen, Glostrup Hospital, Denmark
- Renaud, Sabine** Pain Network, Hopital Pierre BAZIN, Route des Gorges, 38500 Voiron, France
- Reynes, Jean-Francois** Pain Network, Hopital Pierre BAZIN, Route des Gorges, 38500 Voiron, France
- Romanek, Kathleen, M.** Edwin & Ruth Kennedy Distinguished Professor of Psychology, 200 Porter Hall, Psychology Department, Ohio University, Athens, OH 45701-2979, USA
- Rosen, Noah** Jefferson Headache Center, 111 South 11th Street, Suite 8130, Philadelphia, PA, USA

5

Approach to headache management: USA, UK, and India compared

K. Ravishankar

Objectives

Headache medicine is fast emerging as a new subspecialty, which has resulted in a surge in the number of headache centres across the globe. But interestingly, headaches are not all recognized, diagnosed, and treated the same way across different regions of the world! Geographical factors, genetic differences, cultural barriers, and varying strategies of treatment—all have a bearing on the final outcome of headache management.

This chapter attempts to broadly compare the approach to headache management across three continents—America, Europe, and Asia (more specifically the USA, the UK, and India). The impressions are not a scientific comparison but only a personal ‘point of view’ based on observations from patients who have attended the headache clinics at different locations where the author has worked.

Background and methods

Having had the opportunity to train in the USA (Houston Headache Clinic) and UK (City of London Migraine Clinic), and practising now through headache clinics in tertiary care hospitals in Mumbai, India, the author is uniquely positioned to compare practice methodologies across different continents.^{1,2}

Factors that can influence the outcome of headache management are discussed under the following headings.³

1. Headache centre infrastructure
2. Referral and consultation patterns

3. Headache pattern, patient and physician attitudes
4. Diagnostic and treatment strategies.

Results

Headache centre infrastructure

The size and structure of headache clinics vary between countries depending on the healthcare system, the social and economic issues, and the importance given to headache disorders.

- ◆ *USA*: clinics are more spacious with greater focus on maintenance of records. Most clinics incorporate diagnostic services such as EEG, computed tomography scan, thermography, and biofeedback (BFT). Behavioural therapy and BFT are given more importance.
- ◆ *UK*: clinics in the UK do not generally incorporate investigation facilities on the premises. BFT is not so popular as in the USA. Physical therapy is given more emphasis.
- ◆ *India*: because of space constraints, headache clinics in India are smaller. Records are maintained in the hospital but the patient is also given a prescription with the diagnosis and salient findings entered, so that one does not have to ask for hospital records from the previous hospital. Patients are given a copy on request.

Referral and consultation patterns

- ◆ *USA*: some patients are referred but most consult directly, but always with a prior appointment. Follow-up is through the same headache clinic rather than by the general practitioner (GP).
- ◆ *UK*: patients are referred by the family physician and direct consultations are fewer. Follow-up care is through the GP. Here again, consultations are by prior appointment only.
- ◆ *India*: some patients are referred, but most are direct consultations. Follow-up is through the headache clinic. Patients do not always consult by prior appointment. Walk-in consultations are common in India. Clinics are therefore overcrowded and the headache specialist may not get adequate time with the patient. Telephone consultations are easier in India where the patient in an emergency can contact his/her treating headache specialist immediately.

Headache pattern, patient and physician attitudes

- ◆ *USA*: patients are well educated about their headaches. Literacy levels are high. Expectations are right. Chronic daily headache and transformed migraine are

commonly used terminologies. Temporomandibular joint problems are more commonly diagnosed. Medication overuse headache is common.

- ◆ *UK:* patients are educated and good historians. Chronic daily headache and transformed migraine are not terms that are usually employed. Temporomandibular joint is not a common diagnosis. Medication overuse headache is less commonly encountered
- ◆ *India:* most headaches are still diagnosed as being due to refractive errors (72%), sinusitis (53%), or acidity (34%). Shorter headaches (7%) are seen less commonly. Medication overuse headache (6%) is less common. The incidence of migraine with aura (9%) is less.⁴ There are too many myths, misunderstandings, and fixed notions.

Diagnostic methodologies and treatment strategies

- ◆ *USA:* patients are put through tests more easily. Disability assessment, stratified care, use of the latest triptans, use of botulinum neurotoxin (BONT-A) and hospitalization for chronic headaches are strategies that are well accepted and commonly used. BFT is very popular in the USA. Certain useful drugs such as flunarizine are not available. Ergotamine is not prescribed any longer.
- ◆ *UK:* investigations take time and there is a long waiting-list. Inpatient management is not as common as in the USA. Disability assessment, triptan usage, and use of BONT-A are less common. More than BFT, physical therapy is given emphasis.
- ◆ *India:* ergotamine usage is still common. Not all triptans are available. BONT-A is not common and inpatient management is unheard of. BFT is not available easily but yoga is very popular. Patients do not prefer nasal sprays or suppositories.

You need to advise trigger-control differently in India. With the high heat and light levels, triggers in India are different. Chocolates, cheese, and red wine are not triggers in India. Environmental factors, fasting habits, dietary factors, and hair-wash are common triggers.⁵

Conclusions

Headache management is a unique subspecialty where diagnostic approach and management strategies differ across continents. Headache specialists and headache centres need to adapt based on these observations.

By highlighting the contrasting approach between the West (USA and UK) and the East (India), we have attempted to emphasize the gaps in the way headache is managed across different regions of the world. No single approach strategy can be labelled ideal. It is therefore important for the 'global campaign' against headache to set up a worldwide observatory of headache based on regional differences and to direct efforts accordingly.⁶

Table 5.1 Approach to headache management: USA, UK, and India compared

	USA	UK	India
Infrastructure and set-up	+++	++	+ -
Level of sophistication	+++	++	+ -
Appointment system	+++	+++	+
Walk-in consultations	0	0	+++
Record keeping	+++	++	+
Follow-up care	Direct	Through GP	Direct
Healthcare system	Managed care	NHS + private	State (90%) and private (10%)
Telephone consultation	During working hours only	During working hours only	At all times. Cell phones also
Literacy level of patients	+++	+++	+
Availability of treatment options	+++	+++	++
Triptans	+++	++	+
Use of BONT-A	+++	+	+ -
In-patient care	+++	+	0
Cost of treatment	+++	++	+

References

1. Mathew NT (1983) New horizons in the management of headache: the headache clinic. *Neurol Clin* 1, 533-49.
2. Lipton RB, Scher AI, Steiner MB *et al.* (2003) Patterns of health care utilization for migraine in England and in the United States. *Neurology* 60, 441-8.
3. Ravishankar K (2004) Barriers to headache care in India and efforts to improve the situation. *Lancet Neurol* 3, 564-7.
4. Ravishankar K (1997) Headache pattern in India—a headache clinic analysis of 1000 patients. *Cephalalgia* 17(3), 316-17.
5. Ravishankar K (2000) Unusual Indian migraine trigger factors. *Cephalalgia* 20, 358-9.
6. Steiner TJ (2004) Lifting the burden: the global campaign against headache. *Lancet Neurol* 3, 204-5.