Critical Evaluation of Headache Classifications

Baş ağrısı Sınıflamalarına Eleştirel Bakış

Aynur ÖZGE

Mersin University, Medical Faculty, Department of Neurology, Mersin, Turkey

ABSTRACT

Transforming a subjective sense like headache into an objective state and establishing a common language for this complaint which can be both a symptom and a disease all by itself have kept the investigators busy for years. Each recommendation proposed has brought along a set of patients who do not meet the criteria. While almost the most ideal and most comprehensive classification studies continued at this point, this time criticisms about withdrawing from daily practice came to the fore. In this article, the classification adventure of scientists who work in the area of headache will be summarized. More specifically, 2 classifications made by the International Headache Society (IHS) and the point reached in relation with the 3rd classification which is still being worked on will be discussed together with headache subtypes. It has been presented with the wish and belief that it will contribute to the readers and young investigators who are interested in this subject. (*Archives of Neuropsychiatry 2013; 50 Supplement 1: S8-S13*)

Key words: Headache, classification, criterion, International Headache Society

Conflict of interest: The authors reported no conflict of interest related to this article.

ÖZET

Baş ağrısı gibi subjektif bir duyuyu objektif hale taşımak, gerek semptom, gerekse başlı başına bir hastalık olabilecek bu yakınma için ortak bir dil oluşturmak yıllardır araştırmacıları meşgul etmiştir. Yapılan her öneri, ölçütlere uymayan hastalar yığınına da beraberinde getirmiştir. Bu noktada ideale en yakın ve en kapsamlı sınıflama çalışmaları devam ederken, bu kez de günlük pratikten uzaklaşmaya dair eleştiriler gündeme gelmiştir. Bu yazıda baş ağrısı alanında çalışan bilim insanlarının sınıflama macerası özetlenecektir. Daha özgün anlamda ise Uluslararası Baş ağrısı Cemiyetinin (IHS) yapmış olduğu 2 sınıflama ve halen üzerinde çalışılan 3. sınıflamaya ait gelinen nokta baş ağrısı alt tipleri özelinde tartışılacaktır. Konuya ilgi duyan okuyucuya ve genç araştırmacılara katkı sağlaması dileği ve inancıyla dikkatinize sunulmuştur. (*Nöropsikiyatri Arşivi 2013; 50 Özel Sayı 1: S8-S13*)

Anahtar kelimeler: Baş ağrısı, sınıflama, kriter, Dünya Baş ağrısı Cemiyeti

Çıkar çatışması: Yazarlar bu makale ile ilgili olarak herhangi bir çıkar çatışması bildirmemişlerdir.

Introduction

Headache as the main or accompanying symptom is one of the most common reasons for referring to a physician. When headaches are addressed as a morbidity, the classification process has gained significance in terms of speaking the same language. The process which initiated as inclusion and exclusion criteria in previous studies has extended to classifications made by team work afterwards.

The effort to establish a common language for headaches began with the diagnostic criteria recommended by Vahquist in 1955 (1). The "Ad-Hoc" committee met under the roof of the "National Institute of Health" in 1962 published a classification of headache as a brief lexical definition (2). This classification was debated, since it contained explanations which were open to subjective

interpretations. Under the light of these debates, the diagnostic criteria for migraine recommended by Prenskey and Sommer were published in 1979 (3). ICHD-I (International Classification of Headache Disorders) published in 1988 by the classification sub-committee established under the roof of the International Headache Society (IHS) established in 1982 was the first serious study related with classification together with criticisms and recommendations published afterwards (4). Tclassification was composed of 96 pages and included 165 different diagnoses. In the direction of the criticisms made for this classification which was used as a beneficial guide for physicians for years, new classification studies were initiated in 1993 (5). The commission which could come into operation only in 1999 completed its work in 2002 and published it in 2004 in Cephalgia journal like the first one (ICHD-II) (6). This second version was composed of 160 pages and included 259

Correspondence Address/Yazışma Adresi

Aynur Özge MD, Mersin University, Medical Faculty, Department of Neurology, Mersin, Turkey

Gsm: +90 532 662 31 80 E-mail: aynurozge@gmail.com Received/Geliş tarihi: 07.06.2013 Accepted/Kabul tarihi: 09.06.2013

© Archives of Neuropsychiatry, published by Galenos Publishing. / © Nöropsikiyatri Arşivi Dergisi, Galenos Yayınevi tarafından basılmıştır.

different diagnoses. Increased flow of information afterwards and recommendations published showed the requirement for a review. The new classification committee met in 2011 under the roof of the IHS initiated new classification studies (ICHD-III) with a working schedule in parallel to the ICD-11 schedule developed by the World Health Organization. The final version of this new classification of which the extended sketch version (beta version) will be published and become open to criticism in 2013, in contrast to previous classifications is planned to be published fully at the end of 2015 or at the beginning of 2016. In this article, some technical and observational information related with new classification studies will be presented as well as information about previous classifications.

The principles recommended by the IHS and considered in the classification can be summarized as follows:

- Both classifications were attentive to be in parallel with the ICD classifications recommended by the World Health Organization (WHO). However, all the titles here are not included in the ICD classification, since the ICHD classification is more extensive.

- Each different type of headache experienced by a patient should be stated separately. The cause which is the reason for referring to a physician or which disrupts daily life activities with the highest rate should be stated in the first order and the others should follow this. Here, the type of headache which is noted phenotypically and is observed frequently in the last one year is in question. In the genetic and research-based point of view, all pains experienced for a life time may need to be stated.

- In the hierarchic point of view, the main group (primary and secondary headache) constitutes the first stage, the type of pain (like migraine) constitutes the second stage, the subtype (like migraine with aura) constitutes the third stage and the subform (like migraine with visual aura) constitutes the fourth stage in classifications. Each patient may receive more than one code for the pains he/she has.

- In patients who do not fully meet the criteria, "possible" conditions or primary headache characteristics should be considered and it should be ensured that all subtitles are reviewed.

- In presence of a second conditions which shows causal or temporal relation with headache, this pain is coded in the group of secondary headaches (Code 5-13). However, it should be kept in mind that secondary headache may develop in the follow-up in a patient who was coded as primary headache and this condition should be coded separately. Again, the type of headache may change its course in time and need to receive a different code (for example, migraine without aura may become frequent in time and recoded as "chronic migraine").

- In all subtitles, the last article is stated as "if another diagnosis of headache is excluded". In all classifications, the differential diagnosis is a subject which should be emphasized sensitively. Sometimes, the predicted reason may not be a condition which actually explains the pain. For example, an arachnoid cyst may be detected, but the patient may have chronic migraine. At this point, the decision for a diagnosis of secondary headache should be given carefully by considering the characteristics of the pain.

- Sometimes, the patient may need to be monitored with a pain diary before coding. Such an opportunity will keep both the patient and the physician open to for a second chance and an accurate diagnosis.

- The "attachements" part state the areas of additional reading and open research. This part also includes the titles which are planned to be discussed until the next classification study and

which have not been decided yet in which subtitle they will be included. It would be beneficial to refer to this part for headaches which do not correspond to the main classification.

In the following part, the types of headache reported in two headache classifications published will be given and the expected developments from ICHD-III which is still being studied will be given as an individual interpretation supplied by discussions I witnessed in the classification sub-committee. When the ICHD-III is published, this part will have the opportunity to be discussed in a more detailed fashion.

Part 1

Primary Headache Disorders

1. Migraine

ICHD-I (1988) ICHD-II (2004)

1.1 Migraine without aura

1.2 Migraine with aura

1.3 Ophtalmoplegic Migraine

1.4 Retinal Migraine

1.5 Periodic syndromes of the childhood

1.6 Migraine complications

1.7 Migraineous disorders (included in the "attachemnts" part in the new classification)

1.1 Migraine without aura

1.2 Migraine with aura

1.3 Periodic syndromes of the childhood

1.4 Retinal Migraine

1.5 Migraine complications

1.6 Probable Migraine (newly added)

13.1.7 Ophtalmoplegic Migraine (shifted to the part of neuralgias)

Notes for ICHD-III

1.1 Migraine without Aura

This is a subgroup on which there is a consensus about the diagnostic criteria. However, the need for a revision for the period and characteristics of pain in individuals below the age of 18 years have been mentioned in many extensive studies. An explanation on this subject is expected from the new classification.

"Migraine attacks related with menstruation" or "menstrual migraine" which is still being discussed intensively is included in the "attachements" part and it is expected that discussions will continue until the issue becomes clear.

1.2 Migraine with Aura

Aura subtypes and migraine aura without headache will be addressed in this group. Here, motor, brain stem and retinal findings are also expected to be included into the types of aura. It is recommended that subtitles including basilar migraine included in this scope. At this point, the issue of aura to be or not to be typical can be evaluated as a separate marker. Again, it is expected that temporal and phenomenological characteristics related with the definition of aura are displayed more clearly.

1.2.3 Hemiplegic Migraine

It is one of the migraine types on which the greatest flow of information is present with increasing genetic studies in recent years. It will be included here with its different subtypes which will be defined according to genetic characteristics.

1.2.4 Retinal Migraine

This type which was coded as a separate subtype in previous classifications is recommended to be included in the subtitle of migraine with aura.

1.3 Chronic Migraine

This groups which is one of the most extensively discusses titles of ICHD-II will be removed from "migraine complications" and included in a separate title in the new classification in accordance with the recommendations. The issue of subtypes of chronic migraine with and without painless period will also be discussed in this part.

1.4 Migraine Complications**1.5 Probable Migraine**

This is a definition made for patients who meet the criteria for a certain migraine type, but who do not have sufficient number of attacks and will be expressed together with the clinical type of migraine.

1.6 Episodic syndromes which may be related with migraine

In the part of „Attachments“, especially menstruation-related migraine subgroups, alternative diagnostic criteria for migraine with aura, the criteria discussed for chronic migraine subtypes with and without painless period, variable hemiplegic migraine subgroups and vestibular migraine will be discussed.

2. Tension type headache

ICHD-I (1988) ICHD-II (2004)

2.1 Tension type episodic headache

2.2. Tension type chronic headache

2.3 Tension type chronic headache which does not meet the criteria above

2.1 Rare episodic tension type headache

2.2. Frequent episodic tension type headache

2.3. Chronic tension type headache

2.4. Probable tension type headache

Notes for ICHD-III

In this group in which no significant change is expected, especially patients with a second accompanying diagnosis including medication abuse or chronic migraine gain importance. The importance of separate coding in these patients is emphasized. This an area of study on which more research is expected to be made in future years in terms of its pathophysiology and clinical properties.

3. Trigeminal Autonomic Headaches

ICHD-I (1988) ICHD-II (2004)

3.1. Cluster headache

3.2. Chronic paroxysmal hemicrania

3.3. Autonomic headaches which do not meet the criteria above 3.1. Cluster headache

3.2. Paroxysmal hemicrania

3.3. SUNCT

3.4. Probable trigeminal autonomic headache**3.3 Short-term, unilateral neuralgiaform headache attacks**

-SUNCT(episodic and chronic subforms)

-SUNA (episodic and chronic subforms); this type which is included in the „attachments“ part in ICHD-II is expected to be shifted to this part as a new pain type.

3.4 Hemicrania continua

It is expected that this subtitle coded in 4.7 in ICHD-II to be shifted to the title of "autonomic headaches" again in the directions of the criticisms made. Its subtypes which are persistent and which are not persistent are being discussed.

4. Other Primary Headaches

ICHD-I (1988) ICHD-II (2004)

4.1. Stabbing headache

4.2.benign headache related with cough

4.3.benign headache related with body fatigue

4.4. Headache which occurs during sexual activity

4.5.Hypnic headache 4.1.Primary stabbing headache

4.2.Primary cough headache

4.3.Primary exercise headache

4.4.Primary headache accompanying sexual activity

4.5.Hypnic headache

4.6. Primary thunder headache

4.7. Hemicrania continua

4.8.New daily persistent headache

Notes for ICHD-III

Primary stabbing headache will be shifted from the first order to the 7th subgroup.

4.1 Primary cough headache

Some adjustments related with the period of pain and accompanying symptoms are expected.

4.5 Cold stimulus headache

This type of pain which is related with direct or indirect exposure to environment stimulus will be shifted to this part from the subtitle of 13.11.

4.6 External-compression headache

This is a specific type of pain which is caused by persistent compression on the head and will be shifted to this part from the subtitle of 13.110.

4.8 "Nummular" headache

This is a definition made for primary headaches felt in a limited area of the head as a nummular form. It was included in the part of 13.7.1 and "Attachments" in ICHD-II.

For many types of headaches in this group the subtitle "probable" will be added.

In the part "Attachments", "epicraniafugax" which is characterized with short-term stabbing linear or zig-zag pain attacks in the hemicranium will be discussed.

5. Headaches defined with head-neck traumas

ICHD-I (1988) ICHD-II (2004)

5.1.Acute posttraumatic headache

5.2. Chronic posttraumatic headache

5.1.Acute (<7 days) posttraumatic headache

5.2.Chronic (>3 months) posttraumatic headache

5.3.Acute post-whiplash trauma headache

5.4.Chronic post-whiplash trauma headache

5.5. Headache related with traumatic intracranial hematoma

5.6.Headache related with other head and/or neck trauma

5.7.Post-craniotomy headache

Notes for ICHD-III

5.1 Acute (<7 days) posttraumatic headache*

5.2 Chronic (>3 months) posttraumatic headache*

5.3 Acute post-whiplash trauma headache.

5.4 Chronic post-whiplash trauma headache

5.5 Acute post-craniotomy headache

5.6 Chronic post-craniotomy headache

* Suntypes will be added according to severe or mild trauma.

It is not expected that the subtitle related with traumatic intracranial hematomas in the subarachnoid or intracranial region in ICHD-II takes part in the new classification. This issue is still being debated.

In the part "Attachments", "headache secondary to radiation therapy" and acute and persistent forms of head-neck pains in different localizations will be discussed.

6. Headaches related with or accompanying cranial or cervical vascular diseases

ICHD-I (1988) ICHD-II (2004)

6.1.Headache related with acute ischemic cerebrovascular disorders

6.2.Headache related with intracranial hematoma

6.3.Headache related with subarachnoid hemorrhage

6.4.Headache related with vascular structural disorder without rupture

6.5.Headache related with arteritis

6.6.Carotid or A. Vertebralis pain

6.7.Headache related with thrombosis in cranial nerves

6.8. Headache related with high arterial pressure

6.9. Headache related with other vascular diseases

6.1. Headache related with acute ischemic cerebrovascular disorders

6.2.Headache related with intracranial hematoma/Subarachnoid hemorrhage

6.3.Headache related with non-ruptured vascular malformation

6.4. Headache related with arteritis

6.5. Carotid or A. Vertebralis pain

6.6.Headache related with cerebral vein thrombosis

6.7.Headaches related with other intracranial vascular disorders

Notes for ICHD-III

In this part, the following changes will be included:

6.8 Headache related with genetic vasculopathy

It is expected that this title will be shifted to a separate subtitle other than the "other" title found in the previous classification and CADASIL, MELAS and other genetic vasculopathies will be included under this title.

6.9 Headache related with intrapituitary hemorrhage

Similarly, headaches related with intrapituitary hemorrhages are expected to be assessed as a separate subtitle.

7. Headaches in Non-vascular Intracranial Diseases

ICHD-I (1988) ICHD-II (2004)

7.1.Headache related with increased CSF pressure

7.2. Headache related with decreased CSF pressure

7.3. Headache related with intracranial infection

7.4. Headache related with intracranial sarcoidosis and other non-infectious inflammatory processes

7.5. Post-intrathecal injection headache 7.6.Headache related with intracranial neoplasms

7.7. Headache related with other intracranial diseases

7.1. Headache related with increased CSF pressure

7.2. Headache related with decreased CSF pressure

7.3. Headache related with non-infectious inflammatory diseases

7.4. Headache related with intracranial neoplasms

7.5. Headache related with intrathecal injection

7.6. Headache related with epileptic seizures

7.7. Headache related with Chiari-Type I malformation

7.8. The syndrome of transient headache and neurologic deficits with CSF lymphocytosis

7.9. Headache related with other non-vascular intracranial disorders

Notes for ICHD-III

"The syndrome of transient headache and neurologic deficits with CSF lymphocytosis" which was coded as 7.8 in ICHD-II will be evaluated under the title of "7.3 Headache related with non-infectious inflammatory diseases".

No significant change has been reported for other subtitles.

8. Headache related with the effects or discontinuation of drugs

ICHD-I (1988) ICHD-II (2004)

8.1.Headaches related with the acute effect of substances

8.2. Headaches related with the chronic effects of substances

8.3.Headaches related with discontinuation of acute usage of substances

8.4. Headaches related with discontinuation of chronic usage of substances

8.5.Headache related with discontinuation of substances which do not have a safe mechanism of action

8.1. Headaches related with acute use of substance or impact of substance

8.2. Headache related with drug overuse 8.3. Headache which occurs as a side effect of chronic use

8.4. Headache related with discontinuation of substance

Notes for ICHD-III

8.1. Headaches related with use of substance or impact of substance

When compared with ICHD-I, it is expected that use of marijuana will be removed from this group listed in 11 subgroups in ICHD-II and acute pressor agents, non-analgesic drugs and hormones will be added as separate titles.

8.2. Headache related with drug overuse

In this group, not only analgesics, but all specific headache therapies and subtitles related with substance use will be noted in chronic drug overuse. For each substance specific "overuse" doses will be noted.

9. Headache related with Infection

ICHD-I (1988) ICHD-II (2004)

9.1. Viral infections 9.2. Bacterial infections

9.3. Headache related with other infections 9.1. Headache related with intracranial infection

9.2. Headache related with systemic infection

9.3. Headache related with HIV/AIDS

9.4. Post-infectious chronic headache

Notes for ICHD-III

In this part, two important points are noted. The first one is the period of infection; infectious pictures shorter than 3 months are qualified as "acute" and longer conditions are qualified as "chronic. Here, the temporal relation between the infectious picture and headache clinic will be considered primarily. The second important point is the fact that the type of infectious agents will be excluded and localization will be considered primarily in the new classification. There will be two subtitles here. The first one is headaches related with intracranial infections and the second one is headaches related with systemic infections. The types of infectious agents will be evaluated separately under these main titles.

10. Headache related with homeostasis disorders

ICHD-I (1988) ICHD-II (2004)

10.1. Headache related with hypoxia

10.2. Headache related with hypercapnia

10.3. Headache related with hypoxia together with hypercapnia

10.4. Headache related with hypoglycemia

10.5. Headache related with dialysis

10.6. Headache related with other metabolic disorders

10.1. Headache related with hypoxia

and/or hypercapnia 10.2. Dialysis headache

10.3. Headache related with arterial hypertension

10.4. Headache related with hypothyroidism

10.5. Headache related with fasting

10.6. Cardiac headache

10.7. Headache related with other homeostasis disorders

Notes for ICHD-III

In this part, headaches which do not have a common mechanism of action related with different systemic causes, but have a temporal relation with a disorder in metabolism are addressed. It is recommended that short-term and long-term hypoxemia and/or hypercapnia should be evaluated separately in this group. Short-term hypoxemia predominated in the previous classifications. In addition, specific pictures including "plane trip" and pictures which predispose to chronic hypoxemia including "sleep-apnea syndrome" other than "mountaineer headache or diver headache" are defined as specific subgroups. Especially "headache related with autonomic disreflexia" among headaches related with hypertension is discussed as a new subtitle.

11. Headache related with the diseases of the face and cranial structures

ICHD-I (1988) ICHD-II (2004)

11.1. Headache related with skull disorders 11.2. Headache related with neck diseases

11.3. Headache related with eye disorders

11.4. Headache related with ear disorders

11.5. Headache related with the nose and paranasal sinuses

11.6. Headache related with the chin, teeth and adjacent structures

11.7. Headache related with diseases involving the temporomandibular joint 11.1. Headache related with skull disorders

11.2. Headache related with neck diseases

11.3. Headache related with eye disorders

11.4. Headache related with ear disorders

11.5. Headache related with rhinosinuitis

11.6. Headache related with the teeth, chin and adjacent structures

11.7. Headache related with temporomandibular joint disorder

11.8. Headache related with other disorders of these structures

Notes for ICHD-III

In this group, "headache related with peritrochlear inflammation" is discussed as a subgroup in the group of headaches related with eye disorders.

As a frequently discussed condition, "headache related with the disorders of the sinus and paranasal sinuses" which is known as "sinus headache" is discussed as two separate subtitles as "acute" and "chronic or recurrent" according to the temporal course of the process.

"Headache related with stylohyoid ligament disorder" which also known as "Eagle's syndrome" listed under the title of "other neuralgias" with the code of 13.10 in the previous classification will be shifted to this group.

12. Headache Related with Psychiatric Diseases

ICHD-I (1988) ICHD-II (2004)

The title with the number of 13 was found in this part

12.1. Headache related with somatization disorder

12.2. Headache related with psychotic disorder

Notes for ICHD-III

Headaches related with a psychiatric disorder diagnosed in terms of temporal course which were included in the classification for the first time in ICHD-II have been frequently discussed since that

time. The subtitles limited with somatization disorder and psychosis will be kept in the new classification. However, I think headaches related with specific psychiatric disorders including depression, separation anxiety, panic disorder, specific phobia, social phobia, diffuse anxiety disorder, post-traumatic stress disorder or acute stress disorder will take place in the future classifications.

Part 3

13. Cranial Neuralgias, Central and primary Facial pain and other headaches

ICHD-I (1988)* ICHD-II (2004)
13.1. Trigeminal neuralgia
13.2. Persistent pain related with involvement of cranial nerves
13.3. Glossopharyngeal neuralgia
13.4. Nervus intermedius neuralgia
13.5. Laryngeus superior neuralgia
13.6. Occipital neuralgia
13.7. Central causes of head and facial pains incompatible with trigeminal neuralgia
Other facial pains which do not meet the criteria of 11th and 12th group
13.1. Trigeminal neuralgia
13.2. Glossopharyngeal neuralgia
13.3. Nervus intermedius neuralgia
13.4. Superior laryngeal nerve neuralgia
13.5. Nasociliary neuralgia
13.6. Supraorbital neuralgia
13.7. Other trigeminal branch neuralgias
13.8. Occipital neuralgia
13.9. Neck-tounge syndrome
13.10. External compression headache
13.11. Cold stimulus headache
13.12. Headache related with compression, irritation, strain of the cranial nerves or upper cervical roots
13.13. Optic neuritis
13.14. Ocular diabetic neuropathy
13.15. Herpes Zoster neuralgia
13.16. Tolosa-Hunt syndrome
13.17. Ophthalmoplegic migraine
13.18. Central causes of facial pain
13.19. Other cranial neuralgias or other centrally mediated facial pains

* This group is coded under the 12th article in ICHD-I.

Notes for ICHD-III;

Variables related with the etiology and different localizations will be included into the subtitle of trigeminal neuralgia and the subtitles between 13.4 and 13.7 in ICHD-II will be shifted to this subgroup.

The neuralgia types coded as 13.10, 11 and 12 will be removed from this group and shifted to the related parts. Headache related with ocular diabetic neuropathy will be qualified as "recurrent painful ophthalmoplegic neuropathy".

Many facial pains discussed in the part of "Attachemnts" in the previous classification will constitute a specific group as "persistent idiopathic facial pain".

Facial pain related with paratrigeminal oculosympathetic neuropathy (Raeder syndrome) will be coded as a separate title.

14. Other headache disorders

Conclusion

Conclusively, physicians working in the area of headache should speak a common language and classifications are needed for the research results to be rendered comparable and to be developed. However, there will be cases which will not meet the criteria fully in each period, although each new classification has the aim of covering all cases compared to the previous one. At this point, physician should make "synthesis" diagnoses by combining their own clinical observations with the principles and record the developments by monitoring their patients more closely. When ICHD-III is published, a new and excited discussion period will start and this will accelerate the investigations in the area of headache. Specification of the characteristics of the child-adolescent age group in specific subtitles in the next classification will contribute to education of young physicians and sharing of knowledge of experienced researchers.

References

1. Vahlquist B. Migraine in children. *Int Arch Allergy* 1955; 7:348-355.
2. Ad Hoc Committee on Classification of Headache of the National Institute of Health. Classification of headache. *JAMA* 1962; 179:717-718.
3. Pinsky AL, Sommer D. Diagnosis and treatment of migraine in children. *Neurology* 1979; 29:506-510.
4. Classification and diagnostic criteria for headache disorders, cranial neuralgias and facial pain. Headache Classification Committee of the International Headache Society. *Cephalalgia* 1988; 8(suppl 7):1-96.
5. ICD-10 Guide for Headaches. Guide to the Classification, Diagnosis and Assessment of Headaches in Accordance with the Tenth Revision of the International Classification of Diseases and Related Health Problems and its Application to Neurology. *Cephalalgia* 1997; 17(suppl 19):1-91.
6. The International Classification of Headache Disorders: 2nd edition. *Cephalalgia* 2004; 24(suppl 1):9-160.