

Headache Masters School 2013 in Asia

- For the next generation of experts -

The Project

1. Name of the project: IHS Headache Master School 2013 in Asia
2. Organizer: International Headache Society
3. Local Organizer: Japanese Headache Society
Asian Regional Committee for Headache (ARCH)
4. Supporters: Japanese Neurological Society, Japanese Neurosurgical Society, Japanese Headache Association, Ministry of Health-Labor and Welfare of Japan (applied)
5. Date: March 23-24, 2013
6. Venue: "Tokyo Station Conference" in the vicinity of Tokyo Central Station.

Organizing Committee

Fumihiko Sakai (Chair)	Japanese Headache Society
Peter Goadsby	International Headache Society
Guus G Schoonman	International Headache Society
Allan Purdy	International Headache Society
Norihiko Suzuki	(liaison)

Invited Teachers

Guus G Schoonman (Netherlands)	Allan Purdy(Canada)
Rami Burstein (USA)	Andrew Charles (USA)
Hans C Diener (Germany)	David W Dodick (USA)
Michel Ferrari (Netherlands)	Peter Goadsby (USA)
Hartmut Göbel (Germany)	Vincenzo Guidetti (Italy)
Anne MacGregor (UK)	Jean Schoenen (Belgium) ,
Alan M Rapoport (USA)	

Local Organizing Committee

Chair: Fumihiko Sakai	Japanese Headache Society
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Vice Chairs Koichi Hirata Japanese Headache Society
Shengyuan Yu Chinese Headache Society
Jae-Moon Kim Korean Headache Society
Regina Macalintal Philippines Headache Society
Shuu-jiun Wang Taiwan Headache Society
General Secretary: Yasuhisa Kitagawa Japanese Headache Society

Local Program Committee

Co-Chair: Koichi Hirata (Dokkyo University), Norihiro Suzuki (Keio University)

Financial Committee

Chair: Yasuhisa Kitagawa (Tokai University)

Publicity Committee

Chair: Takao Takeshima (Tominaga Hospital)

Students are from the National Headache Societies in Asia

Japan, Korea, China, Philippines, Taiwan, Thailand, Singapore, India, Australia, Malaysia, Myanmar,

Registration

All the students must be recommended by their national headache societies to register and they have to pay the registration fee of ¥25,000 (US\$300)

Outline of the Headache Master School in Asia

Japanese Headache Society (JHS) and Asian Regional Committee for Headache (ARCH) hold the 2nd Headache Master School under the auspices of the International Headache Society (IHS) on March 23-24, 2013 in Tokyo, Japan.

This Headache Master School aims at the global promotion of the next generation of leaders in the clinical practice and the research of headache.

1) Students

Headache Master School 2013 is designed to educate young physicians and scientists to become strong specialists and global leaders in headache medicine. There will be 150 students recommended by the Japanese and by other Asian national headache societies.

2) Teachers

Thirteen world leading headache authorities have been asked to serve as teachers. Some additional Asian headache experts will also join the teaching staff. The program, which will last two full days, is composed of lectures, debates and intensive small group learning, using case-based methods.

3) Curriculum, Examination, Certificate

Outcome-based education is planned using Case-based method. The program is prepared by the young generation themselves. Desired competency is listed for each session as learning objectives.

The intensive in-person program of two days will be followed by internet learning for three to six months. Brief pre and post 2 days' course examination to evaluate active learning will be made. After three to six months an online open-book examination will be offered. Those who pass will be given a certificate of "Advanced Headache Master" of the IHS.

4) Language and Publications

All the courses at the Headache Master School will be given in English. The Japanese Headache Society will summarize the contents of all the lectures and the small group learning. The original text in English and the translation into Japanese, Chinese and other languages will be available on the websites of the IHS, the JHS and other national societies.

General Objectives and Plans

To learn clinical expertise from world-leading headache specialists

1) 2nd Master school is an Advanced Course

The First Headache Master School was very successful in its aim of promoting headache education for any headache-interested clinicians. The 2nd Headache Master School is aimed at physicians who are already active in clinical practice and/or basic research of headache. The curriculum is planned so that the students learn more and become "specialists and leaders" in headache in the very near future.

2) Emerging leaders of headache medicine

In the past 10 years, with the help of invited speakers from US and Europe, we

have made an effort to educate neurologists and general practitioners. With the increase in the number of physicians seeing patients with headache, there is a wave of interest in headache from physicians in Asia. More hospitals have opened headache clinics. More papers are published in the international journals. The number of leaders in the next generation is growing.

3) Advanced and comprehensive learning

The 2nd Headache Master School will offer an organized program which provides the knowledge of headache through plenary lectures, debates, small group case-based learning and workshops. The most updated headache care, which is based on EBM and specialists' experience, will be the core of the curriculum.

4) Post-learning

After the 2 days' intensive course, students have to continue the post-learning using internet. The concrete methods of post-learning are currently under consideration. Teachers will evaluate students' progress by checking the status of post-learning.

5) Preparing the program

A task force drawn from the students will select the topics that they would like to learn through plenary lectures, debates, and small group learning. The local program committee will attempt to incorporate a wide range of topics in headache medicine. Teachers will select their own topics from those suggested by students and modified by the organizing committee.

Pre-learning will be mandatory to overcome language barrier

- 1) The language barrier among non-English speaking people in Asia still prohibits the fast spread of knowledge from the international headache world. Although the greatest impact is expected from the valuable face to face group learning at the Headache Master School, the best approach by the students is to learn in advance the context of the lectures and the small group case-based learning.
- 2) If the teachers send the text of their teaching and related references well in advance, the students will have a good opportunity to prepare for the Headache Master School. If students know the outline and essence of the learning in advance, at the conference they will be hearing what they almost know. The

teacher will be providing an additional insight which may often illuminate the secret of their specialty. This process will greatly enhance learning efficiency. This process also will help improve the English ability of the students.

3) Website

The contents of the Master School information given to the students in advance and the extracts of the related publications will be put on the website of each national society together with the translated version. A task force of volunteer staff will do the translations. These materials will also be put on the IHS website, the 2nd Master School Section. The Master School Section of the IHS website will offer additional educational contents to the members.

IHS membership

Students of the Headache Master School will be encouraged to become members of the IHS, particularly on-line journal members.

Program (v.9b)

Sat, March 23, 2013

8:30- 9:00 Introduction

Chair: Sakai F

20' ICHD-III and future headache medicine (Goadsby P)

9:00-11:00 Mechanisms of migraine (Pfizer)

Chair: Dodick D

7' a short presentation by a student: (Shibata M)

40' Central mechanism: Charles A

40' Neuro-anatomy relevant to migraine: Burstein R

30' Discussion

11:00-11:15 Break

11:15-12:15 Triptans, What we have learned (Eisai)

Chair: Suzuki N

45' Ferrari M

15' Discussion

12:15-13:00 Lunch

- 13:00-14:30 History taking
Chair: Purdy A
A patient is interviewed by MacGregor A (15+5min)
Comment: Goadsby P (10 min)
A patient is interviewed by Dodick D (15+5min)
Comment: Ferrari M (10 min)
Discussion by all (30 min)
- 14:30-16:00 Chronic migraine and chronic tension-type Headache
Chair: Wang S
Case presentation (7 min) by a student: (Shimizu T)
Case presentation (7 min) by a student: (TBD)
30' Rapoport A
30' Schoenen J
15' Discussion
- 16:00-16:15 Break
- 16:15-17:00 Group learning 1
- 17:00-17:45 Group learning 2
- 17:45-18:00 Break
- 18:00-18:45 Headache in children and adolescents
Chair: Yu S
35' Guidetti V
10' Discussion
- 19:00-20:30 Buffet Dinner

Sun, March 24

- 8:30-9:30 Update in migraine research "highlight"
Chair: Macalintal-Canlas R
30' Dodick D
15' Discussant: Burstein R
20' Open discussion
- 9:30-10:30 TACs (GlaxoSmithKline K.K)
Chair: Kitagawa Y
Case presentation (7min) by a student: (Matsumori Y)
40' Goadsby P

10' Discussion

10:30-10:45 Break

10:45-11:30 Group learning 3

11:30-12:15 Group learning 4

12:15-12:30 Break

12:30-13:15 Lunch

13:15-14:45 Medication-overuse headache (Debate) (Pfizer)

 “Do all analgesics cause MOH and need detoxification?”

 Chair:Rapoport A

 10' Rapoport A: Overview

 Case presentation (7min) by a student: (Unno Y)

 25': Charles A: Pro

 25': Diener C: Con

 10' Discussant: (TBD)

 10' Discussion

14:45-15:45 Women's issues in headache medicine (GlaxoSmithKline K.K)

 Chair:Hirata K

 Case presentation (7 min) by a student: (TBD)

 35' MacGregor A

 15' Discussion

15:45-16:00 Break

16:00-17:00 Integrated approaches at the headache centers (Kyowa-Kirin)

 Chair:Kim JM

 40': Integrated approach in preventive medicine: Göbel H

 10' Discussant: Schoonman G

 10' Discussion

17:00-18:00 Procedural medicine

 Chair: Diener C

 20' Botulinum toxin injection: Dodick D

 20' Nerve blocks and neurostimulation: Schoenen J

 20' Discussion on new treatment approaches

18:00-18:30 General discussion

 Chair: Purdy A

 30' Discussion and Comments on the Master School

18:30-18:35 Concluding remarks: Goadsby P, Sakai F

Specific Objectives

A. Topics to be lectured and discussed at the plenary sessions

0. Introduction: Good morning ICHD-III!

Let's start at the very beginning. When you read you begin with A-B-C, so when you learn headache you begin with ICHD-III.

Chair: **Sakai F**

Speaker: **Goadsby P**

Clinical Questions:

- ✓ Why ICHD-II had to be revised?
- ✓ Are there any difference in classification between ICHD-II and ICHD-III?
- ✓ Which diagnostic criteria were revised and why?

Learning Objectives: At the end of this session, the participants will be able to:

- ✓ Explain the importance of the revision of ICHD.
- ✓ Explain the new classification of headache in ICHD-III.
- ✓ Explain the important points in revised ICHD-III.

1. "Mechanisms of Migraine" (sponsored by Pfizer)

Chair: **Dodick D**

A short presentation by a student (Shibata M)

Speaker: **Charles A** on "Central mechanism"

Speaker: **Burstein R** on "Neuro-anatomy"

Clinical Questions:

a) Central mechanism in migraine

- ✓ Is migraine headache largely central pain?
- ✓ What is the role of hypothalamus in generating migraine?
- ✓ How does the descending pain modulation system work in migraine pathophysiology?
- ✓ Does allodynia play a role in the progression and chronification of

migraine?

b) Neuro-anatomy relevant to clinical manifestations of migraine

- ✓ Is migraine provoked by the nociception at the dural trigeminal nerve terminals?
- ✓ What causes the release of neuropeptides from dural trigeminal nerve terminals in the generation of migraine headache?
- ✓ Is the severity of migraine related to the spread of the neurogenic inflammation?
- ✓ What is the biological basis of photophobia, phonophobia, nausea and vomiting?

c) Additional questions: CSD in migraine pathophysiology

- ✓ Does CSD activate peripheral trigeminal nociceptors to cause migraine headache?
- ✓ Can CSD directly activate central trigeminal sensory neurons without afferent peripheral sensory input?
- ✓ What are the potential triggers to cause CSD in migraine patients?

Learning Objectives: At the end of this session, the participants will be able to:

- ✓ Explain the concept of “migraine syndrome”.
- ✓ Relate the temporal profile of migraine symptomatology.
- ✓ Explain the significance of CSD in the generation of aura symptoms.
- ✓ Interpret the initiation of migraine in relation to the hypothalamic and limbic abnormalities.
- ✓ Explain the role of the sensory system in the development of migraine headache.
- ✓ Explain the anatomical basis of migraine-related clinical manifestations.
- ✓ Design abortive and preventive therapeutic measures based on migraine pathophysiology from the pharmacological and electrophysiological perspectives.

2. Triptans, What we have learned (sponsored by Eisai)

Chair: **Suzuki N**

Speaker: **Ferrari M**

Clinical Questions:

- ✓ How do triptans ameliorate migraine attacks?
- ✓ What are the sites of actions of triptans in relieving migraine attacks?

- ✓ How do we choose one triptan from the others for a migraine patient?
- ✓ What is the most appropriate timing of triptan administration for patients with migraine with aura?
- ✓ Can we administer triptans to patients taking SSRI/SNRI?
- ✓ Does chronic triptan use increase the risk of ischemic stroke?
- ✓ Which subtype of serotonin receptors is the most important target of triptans?
- ✓ How do we treat non-responders or inconsistent responders to triptans?

Learning Objectives: At the end of this session, the participants will be able to:

- ✓ Administer a specific triptan for a migraine patient in consideration of its pharmacological properties.
- ✓ Assess the potential risk of triptan use in consideration of the clinical status of patients.
- ✓ Describe the pharmacological mechanisms of triptans relevant to their migraine-aborting actions.

3. History taking by world-leading headache experts

Chair: **Purdy A**

Interviewers: **MacGregor A, Dodick D,**

Discussants: **Goadsby P, Ferrari M**

Two patients with headache are interviewed by teachers. One teacher interview one of the two patients (15 min for each interview and 5 min for diagnosis and treatment choice). A Japanese-English interpreter is available. (A little more complicated case than Kate's Case in AHS Scottsdale, but similar objectives of case based learning). After the interviews and the comments, we have a plenary discussion session chaired by Purdy A.

Clinical questions

- ✓ How world-leading headache experts interview and examine patients with headache?
- ✓ How do they make diagnosis and treatment choice with patients.

Learning Objectives: At the end of the session, the participants will be able to:

- ✓ Take a history of a headache patient in an efficient manner to clarify the type of the headache in a limited time.

- ✓ Identify the principle of abortive and preventive therapy and strategies to optimize patient 'compliance
- ✓ Implement an evidence-based preventive treatment program for patients with migraine
- ✓ Make a correct diagnosis and understand various factors influencing migraine.
- ✓ Learn the management of low frequency leading to high frequency migraine.
- ✓ Plan a strategy for balanced approach to therapy and management of migraine.

4. Chronic Migraine (CM) and Chronic Tension-type Headache (CTTH)

Chair: **Wang S**

Case presentation by a student (CM: 7min) by a student: Dr. Shimizu T

Case presentation by a student (CTTH: 7min): (TBD)

Speaker: **Rapoport A** Differential diagnosis and classification

Speaker: **Schoenen J** Pathophysiological mechanisms and management

Clinical Questions

- ✓ *How do we diagnose CM and CTTH using ICHD-III?*
- ✓ *What are factors that contribute to chronification of migraine and TTH?*
- ✓ *What are the roles of the central sensitization in the chronification of migraine and TTH?*
- ✓ *How can we treat CM and CTTH patients?*

Chronic migraine

Learning Objectives: At the end of the session, the participants will be able to:

- ✓ *Describe the disease course and clinical features of chronic migraine.*
- ✓ *Identify risk factors of migraine chronification.*
- ✓ *Correctly apply ICHD-III diagnostic criteria of chronic migraine.*
- ✓ *Distinguish between chronic migraine and medication-overuse headache.*
- ✓ *Relate postulated disease mechanisms to clinical manifestations of chronic migraine.*
- ✓ *Implement evidence-based multidisciplinary strategies for the*

management and prevention of chronic migraine.

Chronic tension-type headache (CTTH)

At the end of the session, the participants will be able to:

- ✓ *Describe the disease course and clinical features of chronic tension-type headache.*
- ✓ *Correctly apply ICHD-III diagnostic criteria of CTTH.*
- ✓ *Discuss the role of central sensitization in the development of CTTH.*
- ✓ *Implement evidence-based multidisciplinary strategies for the management and prevention of CTTH.*

5. Headache in children and adolescents:

Chair: Yu S

Speaker: Guidetti V

Clinical Questions

- ✓ *How to establish differential diagnosis of daily headache in children and adolescents?*
- ✓ *What are the major points of differences from adult cases, especially for non-pediatrician (neurologists, neurosurgeon, and physicians)?*
- ✓ *What is the technique asking questions of the child headache subjects?*
- ✓ *What are the tips and pitfalls in use of triptans in children and adolescents? usage, dosage and brands,*
- ✓ *How to manage dizziness/vertigo and abdominal pain in childhood periodic syndromes?*

Learning Objectives: At the end of the session, the participants will be able to:

- ✓ *Correctly apply ICHD-II (ICHD-III) diagnostic criteria of childhood periodic syndrome.*
- ✓ *Explain the major techniques for medical interviews and history taking in childhood headache sufferers*
- ✓ *Explain the multidisciplinary strategies for the management of migraine headache and migraine precursors in children and adolescents*
- ✓ *Describe the course and clinical features of childhood periodic syndrome that are commonly precursors of migraine, i.e. cyclic vomiting, abdominal migraine, benign paroxysmal vertigo of childhood.*

6. Update in migraine research “highlight”

Chair: **Macalintal-Canlas R**

Speaker: **Dodick D**

Discussant: **Burstein R**

Clinical Questions

- ✓ What are the highlights of the most important research advances in the past 2 years from Cephalalgia, Headache and other journals as well as the highlights from International meetings that participants will not have had the opportunity to attend (e.g. AHS Scientific meeting, IHC, EHMTIS)
- ✓ Does the genetic basis of migraine explain the migraine syndrome and give rationale to the current and future treatment?

**7. Trigeminal Autonomic Cephalalgias (TACs)
(sponsored by GlaxoSmithKline K.K)**

Chair: **Kitagawa Y**

Case presentation by a student (7min): Dr. Matsumori

Speaker: **Goadsby P**

Learning Objectives: At the end of the session, the participants will be able to:

- ✓ *Classify the TACs according to the ICHD-III diagnostic criteria.*
- ✓ *Describe clinical features of cluster headache and other TACs.*
- ✓ *Identify the anatomical connections between the trigeminal and autonomic systems.*
- ✓ *Discuss the prevailing concepts regarding the pathogenesis of the TACs*
- ✓ *Describe the diagnostic evaluation to patients presenting with TACs*
- ✓ *Implement evidence-based acute therapy for cluster headache attacks.*
- ✓ *Implement evidence-based preventive therapy for cluster headache.*
- ✓ *Discuss the role of peripheral and central neurostimulation for medically refractory TACs.*

8. Medication-overuse headache (MOH) “Debate” (sponsored by Pfizer)

“Do all analgesics cause MOH and need detoxification?”

Chair: **Rapoport A**

Rapoport A: Overview of MOH

Case presentation by a student (7min) by a student: Dr. Unno Y

Charles A: Pro

Diener C: Con

Discussant: (TBD)

Clinical Questions:

- ✓ *How can we differentiate MOH from chronic migraine that is coexistent with medication overuse?*
- ✓ *Does ICHD-III clarify the diagnostic criteria of MOH?*
- ✓ *What kind of acute headache medication is likely to cause MOH?*
- ✓ *Are NSAIDs protective or causative to the development of MOH?*
- ✓ *Does medication-overuse cause chronic headache (migraine)?*
- ✓ *What are the best management and the outcome of MOH?*

Learning Objectives: At the end of the session, the participants will be able to:

- ✓ *Diagnose MOH by applying the ICHD-3 criteria.*
- ✓ *Identify acute-phase medications causative of MOH.*
- ✓ *Describe the pathophysiological basis of MOH.*
- ✓ *Identify the medications possibly cause MOH.*
- ✓ *Implement rational management of MOH.*
- ✓ *Discuss the need of liaison therapy with psychologists or psychiatrists.*

**9. Women's issues in headache medicine
(sponsored by GlaxoSmithKline K.K)**

Chair: **Hirata K**

Case presentation by a student (7 min): **TBD**

Speaker: **MacGregor A**

Clinical Questions

- ✓ *Why do women have high incidence of migraine?*
- ✓ *Why are the menstrual migraine attacks long-lasting and severe?*
- ✓ *Is menstrual migraine more resistant to triptans*
- ✓ *How does the contraceptive pill affect the menstrual migraine?*
- ✓ *Tips in the treatment for the menstrual migraine.*
- ✓ *How do we use prophylactic triptans for menstruation-related migraine?*
- ✓ *Are nondrug therapies useful for menstrual migraine?*
- ✓ *Suggested migraine treatment for pregnant and breast-feeding women.*
- ✓ *Issues regarding risk of stroke in women with migraine and how hormone therapy influence this risk*

Leaning Objectives: At the end of the session, the participants will be able to:

- ✓ *Obtain tips and pearls on the most effective treatment of menstrual*

migraine.

- ✓ Develop a treatment plan for migraine in women who are pregnant or breast-feeding.
- ✓ Discuss the relationship between and management of migraine with aura in young women and ischemic stroke.

10. Integrated approaches at the Headache Centers (Kyowa-Kirin)

Chair: Kim JM

Integrated approach including preventive medication: Göbel H

Discussant: Schoonman G

Clinical Questions

- ✓ What types of headache patients visit headache centers?
- ✓ What kind's types of headaches are treated by integrated headache care?
- ✓ What types of treatments are included in the integrated headache care?
- ✓ Why are some patients refractory to conventional therapies?
- ✓ What are the mechanism(s) underlying the efficacy of and resistance to migraine preventive medication?
- ✓ How valproic acid is used for the prevention of migraine?
- ✓ Are non-pharmacological treatments effective for refractory headaches?

Learning Objectives: At the end of the session, the participants will be able to:

- ✓ Identify the headache types and patient population most appropriate for and responsive to integrated headache care.
- ✓ Discuss the evidence that supports the effectiveness of multidisciplinary integrated headache care.
- ✓ Implement the evidence and experience-based tips and pearls in managing patients with refractory headache

11. Procedural medicine

Chair: Diener C

Botulinum toxin injection: Dodick D

Nerve blocks and neurostimulation (peripheral and deep brain):

Schoenen J

Clinical Questions

- ✓ What is the evidence base supporting the use of OnabotulinumtoxinA, extracranial nerve blocks, and peripheral and deep brain

- neurostimulation for the treatment of medically intractable headache?
- ✓ What is the mechanism of action of OnabotulinumtoxinA, extracranial nerve blocks, and neurostimulation therapies?
 - ✓ How do you optimize the selection of headache and patient types for procedural therapies?

Learning Objectives: At the end of the session, the participants will be able to
Describe the evidence base, potential mechanism(s), and optimal patient selection for treatment with OnabotulinumtoxinA, extracranial nerve blocks, and peripheral and deep brain neurostimulation.

12. General Discussion

Chair: Purdy A

Comments on Headache Master School 2013 in Asia from teachers, students and organizers

- ✓ Teachers: what we taught & the issues that remain
- ✓ Students: what we learned & how I changed
- ✓ Organizer: what is the impact of the Headache Master School 2013 on headache medicine in Asia, and where do we go from here?

B. Case-based group learning

“How to diagnose and manage primary or secondary headaches”

Presentation by teachers of most instructive cases

Q&A and discussions

Plans

- ✓ *It is a huge challenge to bring top experts in the world to Japan for two day course and to expect that they will impart useful knowledge to the learners at the school.*
- ✓ *The followings are the plans of the local organizing committee.*
 - 1) *One group is 11 or 12 students with mixed Asian nationalities*
 - 2) *One session is 45 minutes*
 - 3) *Teachers are now tutors. They will do listening, strategic questioning and avoid giving lectures*

- 4) *Two cases, a major and a minor cases, are preferable*
- 5) *The first 10 to 15 minutes, is spent for the minor case prepared by each teacher. The purpose is the ice-breaking, the opportunity for students to feel being at the same table with the top expert in the world and the opportunity for teachers to know about students. The case is printed to be given to the students.*
- 6) *The second and the major case should take up the majority of time. It is also prepared by each teacher, hopefully according to the template proposed by Allan Purdy as attached. The case is constructed of pages of history, strategic questions, physical examination, results of tests, more questions and management questions.*
- 7) *The teachers' most instructive case in their career may be presented. If the teacher is not a clinician, the story of impressive research could be presented in a similar way as clinical cases.*
- 8) *It is not so important whether any case is finished. Whether the students understand the process of the thinking about the case is the learning objective.*

Learning Objectives: At the end of the session, the participants will be able to:

- ✓ *Describe diagnosis and treatment of various types of headache*
- ✓ *Diagnose secondary headaches and describe the principals involved in distinguishing primary from secondary such as CSF leaks, IIH, thunderclap headaches, and its various causes, etc.*
- ✓ *Define the state of refractoriness of headache disorders.*
- ✓ *Identify factors responsible for headache refractoriness.*
- ✓ *Design therapeutic approaches for difficult headaches*