

HOSPITAL PHYSICIAN®

NEUROLOGY BOARD REVIEW MANUAL

STATEMENT OF EDITORIAL PURPOSE

The *Hospital Physician Neurology Board Review Manual* is a peer-reviewed study guide for residents and practicing physicians preparing for board examinations in neurology. Each manual reviews a topic essential to the current practice of neurology.

PUBLISHING STAFF

PRESIDENT, GROUP PUBLISHER

Bruce M. White

EDITORIAL DIRECTOR

Debra Dreger

ASSOCIATE EDITOR

Rita E. Gould

EDITORIAL ASSISTANT

Farrowh Charles

EXECUTIVE VICE PRESIDENT

Barbara T. White

EXECUTIVE DIRECTOR OF OPERATIONS

Jean M. Gaul

PRODUCTION DIRECTOR

Suzanne S. Banish

PRODUCTION ASSISTANT

Kathryn K. Johnson

ADVERTISING/PROJECT MANAGER

Patricia Payne Castle

SALES & MARKETING MANAGER

Deborah D. Chavis

NOTE FROM THE PUBLISHER:

This publication has been developed without involvement of or review by the American Board of Psychiatry and Neurology.



Endorsed by the
Association for Hospital
Medical Education

Migraine and Related Headache Syndromes

Editor:

Alireza Atri, MD, PhD

Instructor in Neurology, Harvard Medical School, Assistant in Neurology, Memory Disorders Unit, Massachusetts General Hospital, Boston, MA

Associate Editor:

Tracey A. Milligan, MD

Instructor in Neurology, Harvard Medical School, Associate Neurologist, Brigham and Women's and Faulkner Hospitals, Boston, MA

Contributor:

Paul B. Rizzoli, MD, FAAN

Instructor in Neurology, Harvard Medical School, Associate Neurologist, Brigham and Women's and Faulkner Hospitals, Clinical Director, John R. Graham Headache Center, Faulkner Hospital, Boston, MA

Table of Contents

| | |
|--|----|
| Introduction..... | 2 |
| Approach to Evaluation of Headache | 3 |
| Migraine Management..... | 6 |
| Tension-type Headache..... | 9 |
| Chronic Daily Headache..... | 11 |
| Cluster Headache | 13 |
| References | 14 |

Cover Illustration by Kathryn K. Johnson

Copyright 2006, Turner White Communications, Inc., Strafford Avenue, Suite 220, Wayne, PA 19087-3391, www.turner-white.com. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without the prior written permission of Turner White Communications. The preparation and distribution of this publication are supported by sponsorship subject to written agreements that stipulate and ensure the editorial independence of Turner White Communications. Turner White Communications retains full control over the design and production of all published materials, including selection of appropriate topics and preparation of editorial content. The authors are solely responsible for substantive content. Statements expressed reflect the views of the authors and not necessarily the opinions or policies of Turner White Communications. Turner White Communications accepts no responsibility for statements made by authors and will not be liable for any errors of omission or inaccuracies. Information contained within this publication should not be used as a substitute for clinical judgment.

Migraine and Related Headache Syndromes

Paul B. Rizzoli, MD, FAAN

INTRODUCTION

Headache as a symptom is nearly ubiquitous. Under certain circumstances of pattern, frequency, severity, and other factors, the symptom may qualify for a diagnosis of a primary headache disorder. These headache disorders are among the most common and most debilitating conditions known,^{1,2} and their effect on productivity and quality of life is staggering. In the United States alone, estimates are that 23 million individuals have severe, limiting migraine, resulting in lost productivity of more than \$1 billion per year and accounting for 10 million physician office visits annually.³

Under other circumstances, the symptom of headache may reflect an underlying illness or condition (ie, a secondary headache). Differentiating between primary and secondary headache is the first and most critical step in the diagnostic process. Headache syndromes, especially primary headache syndromes, will be encountered by practitioners in nearly every aspect of clinical medicine. This review focuses on the classification, diagnosis, and management of some of the more common primary headache syndromes.

CLASSIFICATION OF HEADACHE

The current most widely used system for classifying headache is that of International Headache Society (IHS), the International Classification of Headache Disorders, Second Edition (ICHD-II), revised in 2004.⁴ The ICHD-II is designed primarily to afford diagnostic consistency for research purposes. As such, the system classifies headache based on characteristics alone without regard to associated features such as age, sex, family history, or life stressors. Part 1 classifies primary headache (ie, those with no other known cause) as 1 of 4 main types: migraine, tension-type headache, cluster headache and other trigeminal autonomic cephalalgias (TAC), and other primary headaches. Migraine is further subclassified as migraine with or without aura (which can include either the traditional visual aura or sensory symptoms), retinal migraine, complications of migraine, or probable migraine. Tension-type headache is further subclassified as infrequent, frequent, chronic, or probable. Cluster

headaches are grouped with the relatively rare conditions of paroxysmal hemicrania, short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT syndrome), and probable TAC. Finally, other primary headaches include both common and uncommon conditions: stabbing, cough, exertional, hypnic, and thunderclap headaches; headache associated with sexual activity; hemicrania continua; and new daily persistent headache. Secondary headaches, of which there are many, comprise Part 2 of the ICHD-II. Nonetheless, the major utility of the system resides in Part 1, where most of the research efforts have typically been directed and research in headache surged after the implementation of the original IHS system.

From a clinical standpoint, the ICHD-II classification system is difficult to apply in practice. For example, headache types such as chronic daily headache and menstrual migraine do not appear in the system, although these diagnoses remain in wide clinical use. Menstrual migraine does not easily fit into the system because it includes a trigger in the individual patient and thus is not descriptive of the headache itself; it has since been added to the appendix of the 2004 classification. Chronic migraine and chronic tension-type headache appear in the system, along with a category for new daily persistent headache, but not chronic daily headache.⁵

COMMON HEADACHE SYNDROMES: EPIDEMIOLOGY AND CLINICAL CHARACTERISTICS

Migraine

Migraine is a common, chronic, and in some instances progressive genetic neurologic disorder characterized by episodic symptomatology often triggered by environmental variables that, as a common thread, tend to disturb the migraineur's homeostatic balances. Thus, changes in weather, time zone, sleep states, hormonal status, and stress level all tend to be reported as triggers. The potency of the trigger seems to reflect the speed and magnitude of the change (eg, a rapidly approaching low pressure system is more often reported as a trigger than is a slowly developing high pressure system). The menstrual trigger, as another example, is attributed to the rapid fall in estrogen levels just prior to menses.⁶