HOSPITAL PHYSICIAN®

PSYCHIATRY BOARD REVIEW MANUAL

PUBLISHING STAFF

PRESIDENT, PUBLISHER
Bruce M. White

EXECUTIVE EDITOR
Debra Dreger

EDITOR
Becky Krumm, ELS

EDITORIAL ASSISTANT
Deidre Yoder

SPECIAL PROGRAMS DIRECTOR
Barbara T. White, MBA

PRODUCTION MANAGER
Suzanne S. Banish

PRODUCTION ASSOCIATE
Vanessa Ray

PRODUCTION ASSISTANTS
Tish Berchtold Klus
Christie Grams

ADVERTISING/PROJECT COORDINATOR
Patricia Payne Castle

NOTE FROM THE PUBLISHER:
This peer-reviewed 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

The Association for Hospital Medical Education endorses HOSPITAL PHYSICIAN for the purpose of presenting the latest developments in medical education as they affect residency programs and clinical hospital practice.

Psychiatric Manifestations of HIV Disease

Series Editor and Contributing Author: Jerald Kay, MD
Professor and Chair, Department of Psychiatry, Wright State University School of Medicine, Dayton, OH

Contributing Author: Deborah Y. Liggan, MD
Resident, Department of Family Practice, Bethesda Hospital, Inc, Cincinnati, OH

Table of Contents

Introduction 2
Case Presentation 2
Diagnosis 2
Pathophysiology 7
Demographic Aspects 8
Suicide 8
Treatment 9
Board Review Questions 11
Answers 11
References 11

Cover Illustration by Vanessa Ray

Copyright 2000, Turner White Communications, Inc., 125 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, Inc. The editors are solely responsible for selecting content. Although the editors take great care to ensure accuracy, Turner White Communications, Inc., will not be liable for any errors of omission or inaccuracies in this publication. Opinions expressed are those of the authors and do not necessarily reflect those of Turner White Communications, Inc.

next page

Psychiatric Manifestations of HIV Disease

I. INTRODUCTION

Patients with HIV infection are surviving longer as the result of antiretroviral triple-drug combinations that reduce plasma RNA load to unmeasurable levels and prophylactic therapies against the lethal complications of the virus. Unfortunately, antiretroviral drugs do not penetrate well into the cerebrospinal fluid (CSF), nor do they eradicate the virus from the central nervous system (CNS).

What happens when HIV replicates within the CNS? A popular hypothesis is that concentrations of HIV DNA in specific brain areas correlate with clinical neuropsychiatric presentations. Consistent with this postulate, the emerging literature on HIV infection estimates that the incidence of neuropsychiatric dysfunction in patients with HIV disease currently ranges from 30% to 70% and will continue to increase with improved patient survival.[1]

The course of neuropsychiatric illness in HIV infection varies; therefore, an understanding of the relationship between psychiatric disorders and stages of HIV disease is necessary for appropriate evaluation and management. Severe cognitive dysfunction and psychotic phenomena have been known to occur late in HIV disease and are associated directly with CNS involvement. The evolving classification of cognitive dysfunction in HIV infections has also identified mild cognitive decline, depression, and anxiety states, which can occur at any stage of asymptomatic or symptomatic illness. These syndromes are most likely the result of subtle brain involvement preceding the immunologic and neurocognitive impairment that is characteristic of AIDS.[2]

Other illnesses, such as pronounced suicidal ideation and adjustment disorder with depressed or anxious mood, may be associated with key events in the illness, particularly discovery of seroconversion, initiation of antiretroviral treatment, and onset of physical symptoms. The care of HIV-infected patients also encompasses preexisting psychiatric disorders that do not appear to be affected either directly or indirectly by the disease but may confer increased risk for HIV by association with poor impulse control and impaired assessment of risk. These preexisting conditions include bipolar mood disorder, substance use disorders, and severe personality disorders.

II. CASE PRESENTATION

A 34-year-old single waitress presents to a psychiatrist with a 10-month history of fatigue, weight loss, cough, depression, and some difficulty concentrating. Working at a restaurant, she often snacked, and eating has always been something she enjoyed. Now she is infrequently hungry, and she has lost 15 pounds during the past 6 months. Her supervisor made a comment recently that she seemed to be irritable with her customers and coworkers. The patient thinks she might be having some difficulty remembering orders and customer requests. During the past month, she noted that adding up bills for large parties seemed to be a struggle and that she relied more and more on a calculator. The patient also recalled that on 2 occasions within the past month, she dropped dishes while serving customers.

In response to questioning about her sexual activities, the patient acknowledges that since she began working at the restaurant 9 years ago, she frequently accepted dates with customers she did not know, and she often had unprotected sex with these men. Mental status examination indicates that the patient's short-term memory is impaired, although her remote memory seems normal. A chest radiograph suggests a *Pneumocystis carinii* pneumonia, which is later confirmed by bronchoscopy. She is treated for the pneumonia and responds well. Serologic testing confirms that she is HIV positive.

III. DIAGNOSIS

- **What neuropsychiatric assessment tools would be most helpful in characterizing this patient's HIV-related psychiatric dysfunction?**
- **What psychiatric disorders are most often associated with HIV infection?**

Although the central feature of HIV infection involves progressive decline of the body's ability to mount an appropriate cell-mediated immune response, neuropsychological compromise of the CNS is also a significant complication of HIV infection. Investigations of

close window close