A TEXTBOOK OF NEUROLOGY

H. HOUSTON MERRITT

SIXTH EDITION

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To

M. C. M.

Preface

The first edition of this text on neurology, or, more properly, diseases of the nervous system, was published in 1955.

Its general acceptance is attested to by the fact that over 30,000 copies of the fifth edition were published, as well as editions in Spanish, Portuguese and Japanese, and English editions were published in India and China.

The volume is intended for medical students, residents and interns in internal medicine, neurology, neurosurgery, orthopedics and other surgical specialties related to neurology.

The diseases are considered according to etiology. An attempt was made to make the discussion complete but concise, covering incidence, pathology and symptomatology, diagnosis and therapy.

The first editions of the text were written almost entirely by the original author. It soon became obvious that the subject matter became too complex an assignment for a single author.

Again, I am indebted to many of my friends who have provided illustrations for the new edition. I am also greatly indebted to the authors who contributed new material to the text.

H. Houston Merritt

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Contents

Chapter 1

Infections

DONALD H. HARTER, and H. HOUSTON MERRITT

The parenchyma, the coverings and the blood vessels of the nervous system may be invaded by practically all of the pathogenic microorganisms. It is customary, for convenience of description, to divide the syndromes produced according to the chief site of the involvement. This division is an arbitrary one because the inflammatory process not infrequently involves more than one of these structures.

INFECTIONS OF THE MENINGES

Involvement of the meninges by pathogenic microorganisms is known as leptomeningitis. These cases are subdivided into two groups, acute and subacute meningitis according to the severity of the inflammatory reactions, which in part is related to the nature of the infecting organism.

Acute Purulent Meningitis

Microorganisms may gain access to the ventriculo-subarachnoid space by way of the blood stream in the course of a septicemia or as a metastasis from infection of the heart, lung and other viscera. The meninges may be invaded by direct extension from a septic focus in the skull, spine or parenchyma of the nervous system. Organisms may gain entrance to the subarachnoid space through compound fractures of the skull and fractures through the nasal sinuses or mastoid. They may be introduced by lumbar puncture performed for the removal of fluid or the injection of sera, air, contrast media, anesthetics and the like. Neonatal meningitis is frequently due to genitourinary infections in the mother. The pathology, symptomatology and clinical course of patients with acute purulent meningitis are similar regardless of the causative organisms. The diagnosis and program of therapy depend on the isolation and identification of the organism and the determination of the source of the infection.