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THE ABNORMAL PNEUMOENCEPHALOGRAM

BY

LEO M. DAVIDOFF, M.D.

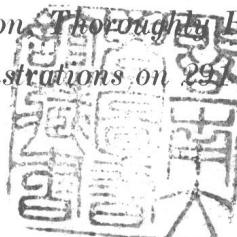
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*Second Edition, Thoroughly Revised, With
696 Illustrations on 297 Figures*



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CORNELIUS G. DYKE, M.D.
1900-1943.

Dedicated to the memory of
CORNELIUS G. DYKE, M.D.
Neuroradiologist



PREFACE TO SECOND EDITION

DURING the interval between editions of this book, the popularity of angiography as a definitive method of diagnosis and localization in cases of brain tumor has increased enormously. Radio-isotope localization is almost standard procedure in major neurosurgical clinics. Electroencephalography has retained its important status as a diagnostic aid in this work. Yet pneumoencephalography remains as a bulwark in the day to day evaluation of neurological and neurosurgical problems. It is true that it is not utilized as frequently as in the past, since the other methods, alone or in combination, may provide sufficient data upon which to base therapeutic procedures. On the other hand, when it is used, nowadays, the indications are more precise and the percentage of demonstrable abnormalities on the encephalograms is definitely higher. When thus utilized it covers a width of the diagnostic spectrum not adequately represented by other technical diagnostic aids and thus enlarges the range of precise neurologic diagnosis and localization.

The exhaustion of the first edition presented us with an opportunity to augment the text and bring it up to date, correct a few inevitable typographic errors and mislabelling of figures, and improve the quality of some of the illustrations.

It is a pleasure again to give recognition to the invaluable help of Mrs. Hilda Feiring and her present assistant, Miss Ruth E. Butler, in retyping and editing the text.

The kindness and cooperation of our publishers and their staff have been a source of gratification which is a delight to acknowledge.

LEO M. DAVIDOFF, M.D.

BERNARD S. EPSTEIN, M.D.

PREFACE TO FIRST EDITION

THE year 1950 marks the 32nd anniversary of the introduction of pneumoencephalography in the diagnosis of neurological disease. Its distinguished inventor, Dr. Walter E. Dandy, is, unfortunately, dead, and its place as the most important laboratory aid in diagnosis and localization, especially of brain tumors, is being challenged by electroencephalography and cerebral angiography. It, nevertheless, still forms the backbone of support for most neurosurgeons in their decisions whether and where to operate.

The second World War and the death of our esteemed and beloved colleague, Dr. Cornelius G. Dyke, have delayed the publication of this book long past the time of the promise of its appearance made in a previous volume on "The Normal Encephalogram." The delay is, however, not without compensation, since it has increased the experience of the authors of the present volume, matured our judgment, and permitted us to evaluate pneumoencephalography in the light of other developments in the field of neurological diagnostic procedures.

Since the work is intended for all those interested in neurological diagnoses, including radiologists, neurologists, neurological surgeons, psychiatrists, pediatricians and internists, its scope was broadened to include the fundamentals of neuropathology of brain tumors. Brief descriptions of clinical syndromes and illustrative case histories were also added to correlate the roentgenographic changes with bedside observations.

Our material was drawn from the neurological and neurosurgical services and roentgenologic departments of the Neurological Institute of the Presbyterian Hospital of New York, the Jewish Hospital of Brooklyn, the Montefiore Hospital and the Beth Israel Hospital of New York City. Our thanks are due to these institutions and particularly to the heads of their respective roentgenologic departments—Doctors Ross Golden, Milton G. Wasch, Solomon Fineman, and Arthur J. Bendick.

Unusual cases not well represented in our own collection were made available to us by Doctors John H. Dale, Jr. and Samuel Z. Levine, Franc Ingraham, Carl List and the Hartford Hospital, to whom we wish to extend our sincerest gratitude.

For the illustrations of gross and microscopic specimens, we are indebted to Drs. Harry M. Zimmerman, Martin Netsky and David M. Grayzel.

Helpful technical assistance was rendered by the late Mr. Max Kulick, and Mr. Wilmer Abbey aided in the reproduction of the photographs. For the drawings we are indebted to Dr. Joseph A. Epstein.

The burden of the preparation of this book was appreciably lessened by the painstaking review of the manuscript by Dr. Emanuel H. Feiring to whom we are greatly indebted for his numerous helpful suggestions.

Our acknowledgements would be indeed incomplete without recognition of the sympathetic cooperation of our wives during the long period of our collaboration.

The typing of the manuscript and its preparation for the publishers were the work of Mrs. Hilda Feiring and her assistant, Miss Mary Norton, without whose enthusiastic devotion and ardent labors it could never have been completed.

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