HYDROPHTHALMIA

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OR

CONGENITAL GLAUCOMA

Its Causes, Treatment, and Outlook

by

J. RINGLAND ANDERSON

M.C., M.D., B.S. (Melb.), F.R.C.S. (Edin.), F.R.A.C.S., D.O.M.S. (Lond.)

Ophthalmic Surgeon to the Alfred Hospital, Melbourne

WITH A FOREWORD BY

SIR JOHN HERBERT PARSONS

C.B.E., D.Sc., F.R.C.S., F.R,S.

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To

MY WIFE

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ILLUSTRATIONS

FOREWORD

In a foreword to Dr Ringland Anderson's book on *Detachment of the Retina*, I expressed the hope that others would follow his good example and provide other such monographs. It is a matter for congratulation that he himself has now written one on *Hydrophthalmia*, a disèase better known under the picturesque but otherwise unsatisfactory name Buphthalmia. The last monograph on this subject was published in 1897 by Dr Edmund L. Gros, under the title *Étude sur l'Hydrophthalmie ou Glaucome infantile*, and was an excellent résumé of our knowledge up to that date. The present is a much more extensive treatise and will long remain authoritative. In dealing with a disease of such obscure aetiology, in which, however, congenital malformations are a prominent factor, the scientific approach must be by way of pathology and comparative anatomy. In both of these respects the treatment here is exhaustive, and beautifully illustrated. Dr Anderson has taken advantage of his special opportunities to obtain specimens from Australian fauna—ornithorhyncus, echidna, pseudochirus, dasyurus—and to describe the condition of the angle of the anterior chamber in them and in tarsius. This is in itself a valuable contribution to comparative anatomy. The remarkable association of hydrophthalmia with neurofibromatosis, facial naevi and other angiomatous conditions is fully discussed.

To the practising ophthalmic surgeon the most important part of the book is the description of all the different methods of operative treatment which have been tried, with a thorough analysis of the results obtained by various surgeons. One cannot help regretting that the survey shows no signs of indicating in the treatment of hydrophthalmia any such hopeful improvements in operative technique as were beginning to bear fruit when Dr Anderson's book on *Detachment of the Retina* was published, and which have proved so successful.

J. HERBERT PARSONS

INTRODUCTION

CONSULTING ROOM, MELBOURNE, 1933.

Father of a 9-year-old boy blind from congenital glaucoma. Grahame had a trephine operation on each eye when he was a year old. Would he have had a better chance without such treatment?

Surgeon. I do not know.

Father. Do any untreated patients with this disease retain sufficient vision to enable them to earn their living for a few years?

Surgeon. I do not know.

Father. If he marries will his children be affected?

Surgeon. I do not know.

The following pages are the result of an attempt to answer these questions: Through the generosity of Messrs G. J. and E. B. Coles, it was possible to send out 874 Questionnaire forms to 346 oculists throughout the world. A summary of the data obtained will be found later in this book.

The author is grateful to the following surgeons for supplying valuable material: Humphrey Neame, London; E. O. Marks, Brisbane; W. R. Fairclough, Auckland, and J. M. Wheeler, New York. The author is indebted to Professor A. W. Mulock Houwer and Captain v. Blaauboer for the specimens from Tarsius. The following pathologists have most willingly aided in its investigation: Drs Rupert Willis, R. B. Maynard and Adelaide Gault. Dr Kevin O'Day kindly allowed the author to examine his sections of *Dasyurus* and *Pseudochirus*. The microphotographs are by Mr Lewis Booth of the Alfred Hospital and Mr H. Marriott of the Department of Anatomy, Melbourne University. The author would express his appreciation of the generosity of those who permitted the use of plates from older works. To Miss Jean McNab and Miss Elizabeth Agar the author would offer his warmest thanks for hours spent in typing and translation.

If it had not been for the enthusiasm and the outstanding ability of Miss Diana Mann, B.Sc., this book would not have been written. For three years her eagerness to understand some of the mysteries

of congenital glaucoma has led her through many hundred pages of foreign works, through the examination of several hundred slides and through the almost endless arduous tasks that are known only by those who carry out a work of this kind. For these labours the author is deeply grateful.

Sir John Parsons, Mr R. R. James and Mr H. B. Stallard have helped in the production of this work and to them and to the Directors of the *British Journal of Ophthalmology* the author would acknowledge his indebtedness.