

REVIEWS OF BOOKS : BOEKRESENSIES

EXERCISES BEFORE AND AFTER CHILDBIRTH

Before and After Childbirth. Ante-Natal and Post-Natal Exercises. By Jane Madders, M.C.S.P., Dip.Phys.Ed. Pp. 31, with illustrations. 3s. Edinburgh and London: E. & S. Livingstone Ltd. 1955.

Contents: 1. Ante-Natal. 2. Procedures and Postures for Normal Labour. 3. Post-Natal.

This booklet consists mainly of photographs to illustrate exercises which can be performed with benefit both before and after labour. The text is confined to short explanations of the 'why' and 'how' of the exercises.

The emphasis is on relaxation and the booklet could well be recommended to mothers and mothers-to-be, who will find it both interesting and useful.

A.H.T.

PORPHYRIN

Porphyrin Biosynthesis and Metabolism. By G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch. and Elaine C. P. Millar, A.H.W.C., A.R.I.C. Pp. 308 with 70 illustrations. 30s. net. London: J. & A. Churchill Ltd. 1955.

Contents: The succinate-glycine cycle. Some properties of 8-aminolaevulinic acid dehydrase. The metabolism of 8-aminolaevulinic acid. Haem and porphyrin formation from glycine, 8-aminolaevulinic acid and porphobilinogen. The rôle of some porphyrins and porphyrin precursors in the biosynthesis of haem. On the synthesis and metabolism of C^{14} -labelled hematoporphyrin. Independent biosynthesis of different haem in chromo-proteins, with special reference to cytochrome c: the rôle of tissue organs. Experimental studies of porphyrin metabolism in cytochrome c synthesis. Porphyrin and chlorophyll biosynthesis in chlorella. Heterogeneous metabolism of haemoglobins. Cellular formation of intermediates during haemoglobin synthesis. Relation of free erythrocyte porphyrins to haemoglobin biosynthesis. Studies of some liver heme proteins and porphyrins in experimental sedormid porphyria. Studies of porphyrins in animals with experimental hepatic porphyria. Metabolism of porphobilinogen and of porphyrins in the rabbit. Precursors of porphyrin and porphobilinogen. Studies on the mechanism of porphyrin biosynthesis with the aid of inhibitors. The formation of porphyrins by photosynthetic bacteria. The synthesis of the uroporphyrins II and IV. General discussion.

This volume records in 20 papers and discussion the rapid developments which have taken place in our knowledge of the

biosynthesis of porphyrins since the subject was discussed at a Ciba Foundation conference in 1951. A discussion of the porphyria diseases was deliberately excluded but there are several communications on the experimental production of porphyria in rabbits by the administration of sedormid and allied compounds. The clinical symptoms and biochemical findings in experimental porphyria are identical with the acute porphyria in humans. However, the light that these studies might throw on the normal biosynthetic process rather than the relation to the porphyria diseases receives prior consideration.

The biosynthesis of porphyrins has been clarified recently in studies by Shemin and his co-workers of the Department of Biochemistry, Columbia University. Together with work by Neuberger, Rimington and others on closely allied problems it represents one of the major achievements of recent biochemical research. The early stages in the biosynthesis of porphyrins, i.e. the synthesis of porphobilinogen from such comparatively simple substances as glycine and succinic acid has been worked out. The further stages to haem formation are still somewhat uncertain. As the Chairman remarked in the closing discussion: 'The porphyrins, uroporphyrin, coproporphyrin and even protoporphyrin are at present like slippery stepping-stones. We can get across to haem but not without getting our feet wet'. The moment at which iron enters into the picture and the mechanism of its incorporation are also still undecided.

Most of the language in this volume will be intelligible only to the biochemist but for those who can read it it makes as fascinating a story as anything in modern biochemistry.

H.Z.

A HANDBOOK OF OPERATIVE SURGERY

A Handbook of Operative Surgery. Surgery of the Stomach and Duodenum. Second Revised Edition. By Claude E. Welch, M.D., D.Sc. (Hon.). Pp. 370, with 79 plates. \$9.00. Chicago: The Year Book Publishers, Inc. 1955.

Contents: 1. Anatomy of Stomach and Duodenum. 2. Historical Summary. 3. Pre- and Postoperative Treatment; Anesthesia. 4. Special Instruments. 5. Incisions and Closure. 6. Congenital Abnormalities. 7. Perforating Wounds. 8. Gastrotomy and Duodenotomy. 9. Gastrostomy. 10. Diverticula of the

Stomach and Duodenum. 11. Hiatus Hernia. 12. Pyloroplasty and Cardioplasty. 13. Side-to-Side Anastomoses. 14. Duodenal and Gastric Ulcer. 15. Other Operations for Complications of Ulcer. 16. Gastric Cancer. 17. Tumours of the Duodenum. 18. Complications of Gastric Resection. 19. Late Complications of Gastric Operations. 20. Anastomosis with Special Clamps. 21. Duodenal Fistula. Appendices. Bibliography. Index.

As a series of clear illustrations to supplement a good text-book of surgery in its approach to the stomach and duodenum, this book is satisfactory. The new chapter on Hiatus Hernia is well done. Otherwise in the reviewer's opinion, it fails badly as a handbook of operative surgery. Surely even a 'young' surgeon

does not welcome 15 pages of text and illustrations of 5 different ways of making a gastrostomy!

One page of arbitrary 'post-operative diets' is the only tribute to the effects of adequate post-operative care in the whole book. An incomplete page of some laboratory values is useless. The suggestion—with illustrations—of the use of squares of Gelfoam for tamponade of a duodenal ulcer overlying the gastroduodenal artery seems fantastic, or even dangerous.

This book should be used only by surgeons experienced in gastro-intestinal surgery.

R.D.H.B.