

HAEMODYNAMICS

Haemodynamics of Aortic and Mitral Valve Disease. Transcatheter studies. By A. J. Gordon, M.D., P. A. Kirschner, M.D., and H. L. Moscovitz, M.D. Pp. vii + 136. Illustrated. 5. New York and London: Grune and Stratton. 1961.

This is indeed an excellent treatise and certainly no cardiac catheterisation should fail to acquire this book.

The book deals with the authors' own investigations on the haemodynamics of aortic and mitral valve disease, and while there is no original contribution the studies and discussions are of a high level.

Trans-catheter puncture was the method of choice to enter the right side of the heart whereas, of course, most centres now use the trans-atrial puncture, using the Ross and Morrow technique.

There is a wealth of information. The authors stress that the primary capillary wedge pressure is not invariably an accurate presentation of left atrial pressure.

From experience mounted it became apparent that the pressure gradient across the mitral valve must be recorded before accurate haemodynamic assessment of mitral stenosis could be made. No detectable pressure gradient exists across the normal valve.

When the mean left atrial pressure is compared with the pressure gradient it appeared that a critical level is reached when the left atrial pressure reaches 26 mm.Hg. Left atrial pressure at this level is often associated with gradients of considerable magnitude and the gradients do not increase proportionately as left atrial pressures exceed this level.

The difficulties of assessing the degree of mitral incompetence in aortic valve lesions are also stressed, but no claims are made that it is easy to tell the degree of each lesion.

The RY over V (RY/V) formula seemed to be closely related to the severity of mitral stenosis, but with significant mitral stenosis plus insufficiency this formula tended to break down. The authors also found that in pure mitral stenosis the mean left ventricular diastolic pressure measured 5 mm.Hg

on the average, being significantly lower than the figure given for normal subjects, which is 8-10 mm.Hg, and that after mitral valvotomy the left ventricular diastolic pressure rose even when no mitral incompetence is being produced.

Another fact stressed is that although the Q-1 delay occurs in mitral stenosis it is not specific, because it has also been noted, for example, in hypertensive patients.

Pulsus alternans of the ventricular pressure in aortic stenosis is also referred to, and other workers are quoted in relation to this fact.

Graphs are shown illustrating the transformation from the central to the peripheral arterial pulse seen normally. In aortic stenosis, tracings taken when the catheter tip is withdrawn from the central aorta to the brachial show less changes than in any of the other conditions they studied.

There are 110 references to the basic literature on this subject.

It is impossible in a brief review to mention all the points brought out in this treatise, and this book is highly recommended to anyone interested in modern haemodynamics.

M.N.

DRUG THERAPY

The Year Book of Drug Therapy. (1961-1962 Year Book series). Ed. by H. Beckman, M.D. Pp. 4 + 62 + 597. \$8.50. Chicago: Year Book Medical Publishers, Inc. 1962.

Professor Beckman has once again produced a valuable series of abstracts of the literature on drugs. With the rapid increase in all the diverse ramifications of the field of pharmacology this annual volume, with its critical editorial annotations, has become a most necessary work.

As in the two previous editions there is an important introductory section on the evaluation of new drugs, and notes on the latest products marketed by the commercial firms. Emphasis is laid on the need for scepticism and for confirmation of the manufacturer's claims by independent, disinterested and competent investigators. Practising physicians and research workers will gain much from a study of this book. N.S.