## REVIEWS

## AUSCULTATION OF THE HEART — USING HEART SOUND RECORD AND ILLUSTRATED BY PHONOCARDIOGRAMS.

## Hideo Ueda, Goro Kaito, Tsuguya Sakamoto.

Nanzando Company Ltd., Tokyo, Japan, 1963 with a long-playing record. Price Yen 2500.

As set out in the introduction, this work is directed to the medical students, interns, and clinicians interested in the examination of the heart. Just as the advent of printing has revolutionised teaching, the advance in electronics and sound engineering have claimed their places in education. The best method of teaching auscultation is through the actual auscultation by the bed side, but this unfortunately is limited by at least two factors: firstly, the number of students in each session can only be small, and secondly, the materials for demonstration are not always available at the right moment. Hence, the obvious solution of tape recording of cases for the purpose of teaching arises. Unfortunately, it is not well appreciated that the aim is to teach actual auscultation of the heart by the human ear, and unless the recording approximates to the actual human range of hearing, such recordings would be of little educational interest. Therefore for recording of this sort to be valuable, it must be not only reasonably comprehensive, but the reproduce-

able material must have a high fidelity of the original as perceived by the ear.

Dr. Ueda and his colleagues have on the whole succeeded in keeping to the above aim and recorded very satisfactorily an album of cardiac sounds. The subject matter consists entirely of heartsound records with phonocardiographic tracings and short notes on each item. Dealing with heart sounds, murmurs, and extracardiac sounds like pericardial rub, they have succeeded, by attention to technical details such as filtering, sound cycles, and selection of cases, in producing a very valuable long playing record. The price is reasonable compared with similar recordings produced elsewhere. The text is in Japanese with English subtitles, but for one interested in the cardiac sounds and phonocardiographic tracing, the lack of knowledge of Japanese should not hinder seriously the appreciation and use of the recording. It should prove a boon to students and teachers of clinical cardiology.

Gwee Ah Leng

## INTESTINAL BIOPSY — CIBA FOUNDATION STUDY GROUP No. 14. J. A. CHURCHILL LTD., LONDON, 1962.

This is the proceedings of a conference on Intestinal Biopsy held at Madrid on the 23rd May 1962, in honour of Professor Jimenez Diaz, founder Director of the "Institute de Investigaciones Clinicasy Medicas," under the auspices of the Ciba Foundation.

The first session is an attempt by C.C. Booth et al to classify better, the histopathology of the different types of Malabsorption Syndromes. Hitherto the terms "Subtotal villous atrophy" and "Partial villous atrophy" have been used to describe the two-dimensional view as seen on conventional light microscopy. The speaker emphasises the importance of getting an overall picture, by the routine use of a dissecting microscope too. This gives a three-dimensional view and often gives an easier, earlier and more accurate diagnosis. By this combined method he advocates the following descriptive terms: ---

1) "Flat" mucosa. 2) "Flat" mucosa with mosaic pattern. 3) "Convoluted" mucosa with mosaic pattern. 4) "Convoluted" mucosa.

During the general discussion at the end of the conference, the consensus of opinion was to, in future, combine the results from the dissecting and light microscope to give a simplified description: Normal, Flat, Ridged or Convoluted, and to further describe separately the mucosal cellular changes.

The second session is on the Electron microscope study of fat absorption both in normal subjects and patients with Idiopathic Steatorrhoea. Here the reviewer was impressed by the beautiful description and Electron micrographs of the villous cells.

SINGAPORE MEDICAL JOURNAL

The third session was interesting in that the speakers consider Coeliac disease of childhood and Idiopathic Sprue of adults as one and the same disease and call it Coeliac Sprue and discuss its pathogenesis.

The next session was on Intestinal Biopsy in Tropical Sprue by the group from Christian Medical College Hospital, Vellore, South India. In their study neither the normal control subjects nor Sprue patients showed any true "normal" villi. The jejunal biopsies showed ridges, leaves and convolutions in both groups in a similar proportion, and they could only come to the conclusion that changes in villous architecture have little effect on intestinal function. They end up by thanking Dr. W.H. Crosby for the gift of two biopsy capsules, and the reviewer wonders why we in Singapore have not thought of this approach.

The conference ended up with a general discussion on the previous sessions and consideration of topics for future research.

J. J. Murugesu