

tion of this field of difficult diagnosis already opened up, and thus to test the truth, or otherwise, of what has been done. The few notes which it is my privilege to present to this meeting to-day, are but a record of these observations and a comparison of the results of other workers.

Two statements should be made concerning the test in order to show the basis of its applications. In 1901, Hans Sachs published the results of his experiments showing that the liver alone was able to convert levulose into glycogen. Those animals with extirpated livers when given levulose, excreted it unchanged. Further, upon experimental grounds, Strauss and others consider that 100 grms. of levulose is readily dealt with by the majority of normal individuals, no trace of it being found in the urine afterwards. There is, however, according to these observers, a percentage of normal—or at all events apparently normal—individuals, varying from 1 to 15 per cent., in whom alimentary levulosuria occurs on taking 100 grms. on a fasting stomach.

We have here briefly summarized and grouped the cases studied:

GROUP I.

With History or Physical Signs Pointing to Hepatic Disease.

Case I.—No. 15,533.—Male, aged 16, Admitted for some signs of general gonorrhœal infection, pain over the plantar fascia and sacral region, pain in the left side of the abdomen and down the left leg. The liver one and a half fingers below the costal margin, spleen readily palpable, no jaundice. Levulose test positive, about $\frac{1}{2}$ per cent.

Case II.—No. 15,413.—Female, aged 51. Jaundice, short illness of three months with severe abdominal pain in the upper half of the abdomen, no vomiting. Loss of weight in two years from 155 to 122 pounds, no history of alcohol or syphilis, bile and albumin in the urine. No fever or ascites. At first the liver was difficult of palpation; after two or three weeks in the hospital one felt that it was definitely made out and enlarged. The levulose test was positive, $\frac{1}{2}$ per cent. being present.

Case III.—No. 15,416.—Male, aged 40. Pulmonary tuberculosis, myocarditis, jaundice, enlarged liver and spleen, occasional attacks of diarrhœa; œdema of the legs. The test was positive from the first.

Case IV.—No. 14,799.—Female, aged 58. Ill several months with attacks of diarrhœa; no pain or vomiting, no history of alcohol or syphilis. The liver and spleen were not enlarged; stomach was displaced. The test was positive in the second hour specimen.

Case V.—No. 14,227.—Male, aged 47. Complained of loss of appe-