

experience, however, one can "read" the analyses, and so use them in coming to a conclusion as to the nature of the patient's trouble. Here, for instance, is an analysis from a case of duodenal ulcer:—

GASTRIC ANALYSIS.

Duodenal Ulcer.

| | |
|-------------------------|-------|
| Total acidity | 80. |
| Total Chlorides | 0.405 |
| Free HCl | 0.055 |
| Protein HCl | 0.275 |
| Mineral Chlorides | 0.075 |

You will observe the high total acidity, the high total chlorides, the great excess of free hydrochloric acid, the high protein hydrochloric acid, with a normal or lessened amount of mineral chlorides. Such an analysis is typical of duodenal ulcer. I know of no condition likely to be associated with such an analysis, with the exception that occasionally in gastric ulcer close to the pylorus, a somewhat similar analysis may be found. In a case of this sort, with a clinical history of pain coming on two or three hours after food, one would be able to assert with confidence the existence of a duodenal ulcer.

In less typical analyses the diagnosis may be less easy. Take such an analysis as the following:—

GASTRIC ANALYSIS.

D. U. Pyloric obstruc. Cholelithiasis.

| | |
|-------------------------|-------|
| Total acidity | 78. |
| Total Chlorides | 0.355 |
| Free HCl | 0.000 |
| Protein HCl | 0.235 |
| Mineral Chlorides | 0.120 |

In this case you will observe that there is no free hydrochloric acid. The total acidity, however, is high, as are the total chlorides, and the protein hydrochloric acid is not diminished. If the absence of free hydrochloric acid were due to chronic gastritis or carcinoma, we should expect a marked diminution both in the total acidity and in the total chlorides, as well as in the protein hydrochloric acid.

Carcinoma, therefore, was excluded. In duodenal ulcer free hydrochloric acid may be diminished or absent:—(1) In between