

enema. He says he has eaten potatoes, and fifteen days after vomit has contained potatoes, although he has taken none in the meantime. Has lost forty or fifty pounds in the last year. He used to weigh 206 pounds, but now only weighs 118 pounds.

*Present condition, Oct. 15th, 1891.* He has a sallow complexion, is greatly emaciated, is gradually getting weaker, and his face presents an anxious appearance. He has almost constant pain in the epigastrium, somewhat aggravated by eating, but by no means limited to the periods at which the stomach contains food. Has tenderness on pressure over the epigastrium. Ten ounces oil were given him, and in three hours only seven ounces were recovered by the stomach pump. Salol was given, and in three quarters of an hour salicylic acid was found in the urine. Lower border of stomach extends a little below the level of umbilicus. Hydrochloric acid absent from gastric contents; ascertained by testing with methyl violet.

This case presents all the phenomena usually observed in a well-marked case of malignant disease of the pylorus, viz.:

- (1) Loss of appetite.
- (2) Pain in the epigastrium, more or less constant.
- (3) Vomiting—three or four hours after eating, and vomit sometimes having coffee-ground appearance.
- (4) Tenderness on pressure over epigastrium.
- (5) Absence of hydrochloric acid from gastric contents.
- (6) Cachexia.
- (7) Dilatation of the stomach.

One sign that could not be made out was the presence of a tumor. The reason for this will be explained further on.

Now let us consider the diagnostic value of some of these signs and symptoms.

First, as to pain. In cancer of the stomach this is somewhat characteristic, and may be dull, aching, gnawing, or lancinating, occurring more or less constantly, and not being specially related to the ingestion of food, although it is usually increased by eating. The pain in this case is of the above character.

Secondly, vomiting. This is characteristic of pyloric obstruction, in that it occurs three or four hours after eating, at a time when the contents of the stomach should be passed on into the duodenum. Then the vomit sometimes contains considerable blood, giving it the coffee-ground appearance, which points to malignant disease of the stomach.

Thirdly, absence of hydrochloric acid from gastric contents. Regarding the diagnostic significance of absence of hydrochloric acid from the gastric juice, Riegel and other observers say that its constant presence is the strongest proof of the absence of cancer, but its absence not a positive evidence of