

instrument himself, and has continued to use it up to the present time. He eats all the ordinary articles of diet, has gained much in flesh and strength, and with ordinary prudence in diet, could easily give up the pump altogether. But, as he finds he can always prevent the bad effects of improper food, he is apt to take good dinners and suppers as he pleases, and pump himself out afterwards.

These two cases, gentlemen, will give you an idea of what I mean by dyspepsia confined to the stomach.

You will observe that in both cases we have the same set of symptoms—attacks of pain and vomiting, coming on, first at long, and then at short intervals. The attacks always excited by the ingestion of food, and the pain ceasing when the stomach is emptied. The disease lasting for years, and growing steadily worse. Medical treatment alleviating the symptoms for longer or shorter intervals, but never permanently.

For these cases, gentlemen, I believe the most rational and effectual treatment to be the systematic use of the stomach-pump.

The cause of the attacks seems always to be the presence of undigested food in the stomach. The longer the disease lasts, the less tolerant does the stomach become of any such substance, until, at last, every day there is an attack of pain and vomiting.

Why the stomach should become so irritable and intolerant of the presence of food, I do not know. Autopsies of such cases show only the lesions of chronic gastritis.

The vomiting, in these cases, seems to be the only effort made by nature to effect a cure. By the use of the stomach-pump we do the same thing, but much more easily and effectually.

Any pattern of stomach-pump will answer the purpose. It is more convenient to use one which holds about ten ounces. The œsophageal tube should be as large as can be easily introduced, and the holes at its end should be as large as possible. The best tubes are the English. They should be thoroughly softened in warm water before they are introduced. After the patient has become accustomed to the procedure, a piece of soft rubber tubing makes the best tube.

In introducing the tube, the patient should sit in a chair with the head upright—not thrown back. You will find that there are two points where the tube is sometimes grasped pretty firmly by muscular contraction—the lower part of the pharynx, and the œsophagus—just before it enters the stomach. Steady, but very gentle pressure usually overcomes that resistance very readily. In some patients, however, you will have to begin with a very small tube, until they become accustomed to it.

After the tube is introduced, you throw in about six ounces of tepid water, and then reverse the syringe, and draw out all the fluid that will come. Then again you reverse the pump and throw in water, and then again draw it out. This process you continue until the water comes out perfectly clear, and without any fragments of food. Adult stomachs will usually hold about twenty-five ounces of water; more than this gives distress.

The best time for washing out is the hour at which the patient has been accustomed to have his attacks of vomiting. If these attacks have occurred daily, the washing out should be done daily. After a short time, you can readily teach the patient to introduce the tube and manage the pump himself; after that, he can carry out the treatment at home, using the pump less and less frequently, as his health improves. At the commencement of the treatment, the patient should take for breakfast and tea nothing but milk, for dinner, mutton chops and baked potatoes. As he improves, you increase his solid food until he eats all the ordinary articles of diet. The rule is not to use the pump until three hours after a meal of solid food, in order that the stomach-tube may not be obstructed by large fragments.

Now let us consider those cases in which the symptoms are due to functional derangement of the small intestine, the stomach being unaffected.

In these patients the symptom which is apt to be the most troublesome is pain. This pain may be referred to any part of the abdominal cavity. It is usually described as a constant dull pain, not like that of colic. It has no special relation to the ingestion of food or to its quality. It occurs when the stomach is full or