

all cases. In 8 there was a sense of swelling or fulness in the epigastrium. Seven cases complained of nausea alone; this was usually worse after meals; the remainder had vomiting. Nine had eructations of gas. The appetite was fair in 6 cases, in 5 it was good, and in 6 it was poor.

The foregoing constitutes the clinical picture of chronic catarrhal gastritis, one of the most frequent disorders that the physician is called upon to treat. The most constant signs are the pain in the epigastrium and constipation, loss of appetite being by no means so regularly present.

The etiology of these cases was not so readily ascertained. The preponderance of the male sex was shown in that 13 of the 17 cases were men. The chief cause was the abuse of alcoholics, both in fermented and distilled liquors. The practice of dram-taking just before meals seemed to exercise an especially deleterious influence. There was a history of excessive use of tobacco in several instances, but no case was uncomplicated by the liquor habit. The ingestion of iced liquids, either before or with meals, seemed to be an exciting cause in four cases. Two of these patients used large quantities of tea. In more than half of the cases the etiology was mixed, and in many no definite cause could be ascertained. These latter, however, all belonged to the dispensary patients, and it is probable that poor and improperly prepared food had much to do with the condition. In no single instance could the disease be traced to pre-existing acute or subacute gastritis. The disorder invariably came on gradually, with periods of amelioration, to be followed by relapses, the symptoms gradually becoming worse until the patients consulted a physician. The duration of the disease varied from several months to many years.

The necessity for washing out the stomach in these catarrhal inflammations has been dinned into our ears for some years. Scarcely a recent textbook can be consulted that does not recommend lavage of the stomach as the remedy *par excellence* in catarrhal gastritis. I have no issue to take with this statement; lavage is one of the best means at our command; but notwithstanding continued reiteration, the method does not seem to have become at all popular or to have met with extended application. The reason is not far to seek. The procedure requires a somewhat cumbersome apparatus and the necessity of teaching the patient how to use it. I do not know what the experience of others has been but my own success in this direction have not been brilliant. Occasionally a patient can be taught to use the tube, and if he will persist he soon comes to like the treatment. As a rule, patients object when the subject is first mentioned, and if they try the method the generally unpleasant effects of the first one or two introductions is sufficient to send them in

search of a physician who employs a less disagreeable treatment. The result has been that the profession has generally adhered to the old-time prescription of bismuth with pepsin, and sometimes a bitter tonic. If any directions are given regarding diet, it is generally no more specific than that he is "to be careful with his diet," or "to eat light food." It is needless to say that these methods are as unphysiologic and unscientific as they are unsuccessful. Patients in this way drift about from one physician to another, until it is not an uncommon experience for them to enter one's office, and after detailing their sufferings, tell you that you need not give them pepsin, bismuth, syrup of the hypophosphites, or beef, wine and iron, as they have had all these.

In catarrhal gastritis the stomach secretes an excessive quantity of mucus. As soon as the food is ingested it is at once coated and prevented from coming in contact with the stomach-wall. The result is that the stomach is not supplied with its normal stimulus, and both the secretion and movements of the organ are lessened. What secretion there is cannot readily reach the food; in consequence, in the absence of the antiseptic power of the gastric juice, the food ferments, gases are formed, and vomiting takes place. The prolonged retention of food and the irritation react to increase the inflammation and congestion of the organ. This morbid cycle, once set up, perpetuates itself with ever-increasing intensity.

The plan employed in treating the seventeen cases that form the basis of this paper consisted in the administration of hot alkaline water before each meal. Sodium bicarbonate is added to the water in the proportion of ten grains to the pint. Of this solution eight, twelve, or even sixteen ounces, according to the severity of the case, are administered at least twenty minutes before each meal. The water should be as hot as can comfortably be borne, and should be taken slowly. By this means the stomach is effectually cleared of its contained mucus, and is prepared for the reception of food. This should consist of a test-meal of from four to six ounces of steak, preferably broiled, with from two to four ounces of bread, thinly buttered. From this starting-point the diet should be increased or decreased as the patient does or does not suffer from nausea or vomiting. The central idea of the diet in these cases is to restrict it largely to proteids, such as lean meats, oysters, and eggs, together with a small quantity of bread. All starches and fats should be excluded, excepting the small quantity contained in the thinly buttered bread. This is a matter of importance because of the readiness with which starches and fats undergo decomposition when gastric digestion is delayed. When the quantity of food that the incompetent organ will digest without leaving a residuum for fermentation has been ascertained, it should be