

MURDOCH (F.H.)

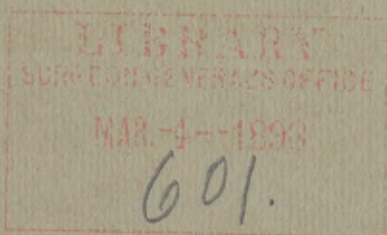
THE DIAGNOSIS AND TREATMENT  
OF CHRONIC GASTRIC  
CATARRH.

BY

FRANK H. MURDOCH, M. D.,  
PITTSBURGH, PA.,

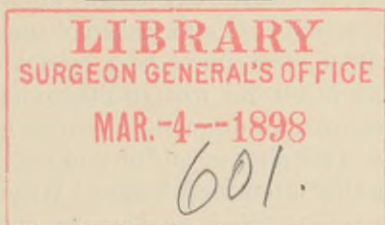
Member of the American Gastro-Enterological Association.

REPRINTED FROM THE  
**New York Medical Journal**  
*for August 28, 1897.*





*Reprinted from the New York Medical Journal  
for August 28, 1897.*



## THE DIAGNOSIS AND TREATMENT OF CHRONIC GASTRIC CATARRH.

By FRANK H. MURDOCH, M. D.,

PITTSBURGH, PA.,

MEMBER OF THE AMERICAN GASTRO-ENTEROLOGICAL ASSOCIATION.

CHRONIC gastric catarrh is a chronic inflammation of the gastric mucous membrane, which, if allowed to continue long enough, may lead to total destruction of the secretory glands, with permanent disappearance of the gastric juice.

Among its symptoms are coated tongue, loss of appetite, distress in the stomach, bloating and belching, nausea and vomiting, vertigo, palpitation of the heart, constipation, insomnia, headache, loss of energy, and diminution in weight.

Many of these symptoms, however, are associated with other forms of stomach trouble, so that it is often quite impossible to make a diagnosis either by a physical examination or by interrogating the patient. Ewald (1) has well said: "Just as readily as the diagnosis chronic gastric catarrh is made, just so little is such an offhand opinion justified in many cases, for neither

the duration nor the ætiology nor the kind of dyspeptic manifestations will suffice to make a diagnosis at once, but, in addition, there must be a careful examination with the aid of all our modern diagnostic resources." Among these modern diagnostic resources nothing is so important as a chemical examination of the stomach contents taken after a test breakfast; and yet even this will not always suffice unless we have an opportunity of making more than one examination.

To illustrate this point, allow me to cite the following case which came under my notice last December:

Miss C., aged forty-two years, had been complaining for a year of insomnia, almost constant distress in the stomach, and frequent attacks of belching. She looked thin and pale, and had lost ten pounds in weight. An examination of the stomach contents an hour after Ewald's test breakfast gave the following results: The roll was not finely divided; there was some mucus; Gunzburg's test showed an absence of hydrochloric acid; Toepfer's gave an acidity of 32; total acidity, 72; biuret+, rennet+, erythrodextrin+, sugar+. She was put upon a proper diet, suitable remedies were administered, and intragastric faradization was used three times a week. For about a month there was some improvement in her condition, then she suddenly grew worse again and complained of much distress and belching. A second examination of the stomach contents was made, and now Gunzburg's test was positive after diluting the filtrate six times with water; Toepfer's test was 104, and the total acidity was 132. The diet and medicines were changed and the electricity continued. For a week the patient did well, then she grew suddenly worse one evening and vomited beef and dry toast which she had eaten for dinner. Two days afterward a third examination showed a total absence of hydrochloric acid, Toepfer's test gave no red color, and the total acidity had fallen to 60.

By comparing the results of the first and third examinations with those obtained in any well-defined case of chronic gastric catarrh it will be seen that there exists no essential difference between them. For instance, a case cited by Einhorn (2) in his recent work on *Diseases of the Stomach*. In both cases there was distress in the stomach, impaired appetite, belching, insomnia, and loss of weight. Hydrochloric acid was absent in both cases; lactic acid was present in one case and absent in the other; rennet was present in one case and not mentioned in the other; erythrodextrin and mucus were present in both cases; in one the acidity was 60 and in the other 72.

*Chronic Gastritis* (Einhorn).

Age of patient,	26 years.
Length of time ill,	4 "
Pain in region of stomach.	
Repeating and flatus.	
Insomnia.	
Hydrochloric acid,	absent.
Lactic acid,	present.
Rennet,	not mentioned.
Biuret,	not mentioned.
Erythrodextrin,	present.
Mucus,	present.
Acidity,	60.

*Dyspepsia Nervosa* (Murdoch).

Age of patient,	42 years.
Length of time ill,	1 year.
Constant distress in stomach.	
Frequent attacks of belching.	
Insomnia.	
Hydrochloric acid,	absent.
Lactic acid,	absent.
Rennet,	present.
Biuret,	present.
Erythrodextrin,	present.
Mucus,	present.
Acidity,	72.

Now one would have been perfectly justified in diagnosing chronic gastric catarrh in the above-mentioned case if the result of one examination could have been depended upon, but a second examination served to exclude that disease and pointed to a neurosis instead. These sudden changes in cases of dyspepsia nervosa are not at all unusual; indeed, in my experience at least, they are quite common.

Chronic gastric catarrh, however, presents the opposite picture, the condition of the stomach contents not varying to any great degree for months at a time. Of this the following case will serve as an illustration:

In April, 1896, Mr. H. came to me complaining of almost constant distress in the stomach, bloating and belching, palpitation of the heart, and insomnia. He had been ill eight months, and had lost twelve pounds in weight. His chest organs were intact, except slight dullness at the apex of the left lung. His stomach was in the normal position. The gastric contents after a test breakfast contained a good deal of mucus; hydrochloric acid was absent; Toepfer's test gave an acidity of 16; the total acidity was 48; biuret reaction +, rennet +, achroodextrin +, sugar +. He was put upon a diet consisting of farinaceous food, a few vegetables, and milk. Strychnine was given three times a day and intragastric faradization and lavage were employed three times a week. These measures, however, failed to relieve the patient's distress, as did also various antifermentative remedies administered by the mouth, although none seemed to agree so well as hydrochloric acid. During the months of May, June, and July there was no improvement in the patient's condition, except that he slept better and suffered less from palpitation.

Early in August hydrochloric acid first made its appearance. With its return the patient began to improve rapidly, and on September 14th he reported a relief of all his symptoms and had gained fifteen pounds in weight.

In diagnosing chronic gastric catarrh we must exclude, besides the neuroses, ulcer, cancer, and atrophy of the gastric glands. In ulcer the pain is much more severe than in gastric catarrh. There may be hæmatemesis, and there is frequently a circumscribed spot of

great tenderness in a line between the ensiform cartilage and the navel. In cancer, the age and appearance of the patient, the length of time ill, the presence or absence of hydrochloric and lactic acids, and the presence or absence of tumor, must all be taken into consideration.

In regard to atrophy of the glands, if we find a constant absence not only of rennet, but of the rennet zymogen as well, we are forced to the conclusion that atrophy has already taken place.

In treating chronic gastric catarrh the patient should be directed to sleep in a sunny, well-ventilated room; to keep regular hours; to take his meals at stated intervals; to eat slowly; to masticate the food thoroughly, and drink nothing while eating; to bathe frequently, take regular exercise every day in the open air, and train the bowels to move every morning after breakfast.

The question of diet is also of very great importance, and yet there is considerable difference of opinion in regard to it. Klemperer favors the administration of predigested food and thinks that vegetables, because they are apt to undergo fermentation, should be avoided.

Ewald gives white bread and butter, cold meat and ham, fish and vegetables, and for beverages, tea, coffee, cocoa, milk, and light wine.

Einhorn allows his patients eggs, tenderloin steak, white meat of chicken, mashed potatoes, rice, farina, hominy, and buttered white bread; and for beverages, tea, coffee, cocoa, kumyss, matzoon, and milk.

The fact is that a diet must be selected for each individual case. If hydrochloric acid is absent, proteids should be avoided, or allowed only in small quantities. It is true that lack of stomach digestion is largely, some-

times completely, compensated for by increased intestinal digestion, but it is not well to embarrass the intestines with food which they are not intended to receive until after it has been acted upon by the gastric juice. If rennet be absent, milk is apt to disagree; and in these cases buttermilk and kumyss are often extremely useful. In regard to the use of the various digestive ferments, the ptyalin of the saliva and the amylopsin of the pancreatic juice are usually quite capable of taking care of the carbohydrates without any artificial aid. If the secretion of the saliva be diminished or absent, taka-dias-tase may be given with advantage; for, as recently shown by Friedenwald (3), it not only digests the starches in the stomach, but serves the other function of the saliva in stimulating the gastric secretion. If no hydrochloric acid is being secreted by the oxyntic cells, and the diet consist partly of albuminous food, hydrochloric acid may be given with the view of converting pepsinogen into pepsin. Lavage should be employed when the stomach contains much mucus. The administration of the bitter tonics, as nux vomica or strychnine, should not be neglected; and the intragastric use of the faradaic current is a remedy the value of which can scarcely be overestimated.

In view of what has been said, one would be justified in drawing the following conclusions:

1. We can not diagnose chronic gastric catarrh without making an examination of the stomach contents.
2. It is often necessary to make more than one examination.
3. Appropriate treatment will in many cases arrest the disease and restore the glands to a healthy condition.

4. The most important factors in the treatment are diet, the bitter tonics, electricity, and lavage.

*References.*

1. Ewald. *Diseases of the Stomach*, p. 338.
2. Einhorn. *Diseases of the Stomach*, p. 172.
3. *New York Medical Journal*, May 29, 1897, p. 734.



# The New York Medical Journal.

A WEEKLY REVIEW OF MEDICINE.

EDITED BY

FRANK P. FOSTER, M. D.

---

THE PHYSICIAN who would keep abreast with the advances in medical science must read a *live* weekly medical journal, in which scientific facts are presented in a clear manner; one for which the articles are written by men of learning, and by those who are good and accurate observers; a journal that is stripped of every feature irrelevant to medical science, and gives evidence of being carefully and conscientiously edited; one that bears upon every page the stamp of desire to elevate the standard of the profession of medicine. Such a journal fulfills its mission—that of educator—to the highest degree, for not only does it inform its readers of all that is new in theory and practice, but, by means of its correct editing, instructs them in the very important yet much-neglected art of expressing their thoughts and ideas in a clear and correct manner. Too much stress can not be laid upon this feature, so utterly ignored by the “average” medical periodical.

Without making invidious comparisons, it can be truthfully stated that no medical journal in this country occupies the place, in these particulars, that is held by THE NEW YORK MEDICAL JOURNAL. No other journal is edited with the care that is bestowed on this; none contains articles of such high scientific value, coming as they do from the pens of the brightest and most learned medical men of America. A glance at the list of contributors to any volume, or an examination of any issue of the JOURNAL, will attest the truth of these statements. It is a journal for the masses of the profession, for the country as well as for the city practitioner; it covers the entire range of medicine and surgery. A very important feature of the JOURNAL is the number and character of its illustrations, which are unequalled by those of any other journal in the world. They appear in frequent issues, whenever called for by the article which they accompany, and no expense is spared to make them of superior excellence.

---

Subscription price, \$5.00 per annum. Volumes begin in January and July.

---

PUBLISHED BY

D. APPLETON & CO., 72 Fifth Avenue, New York.

