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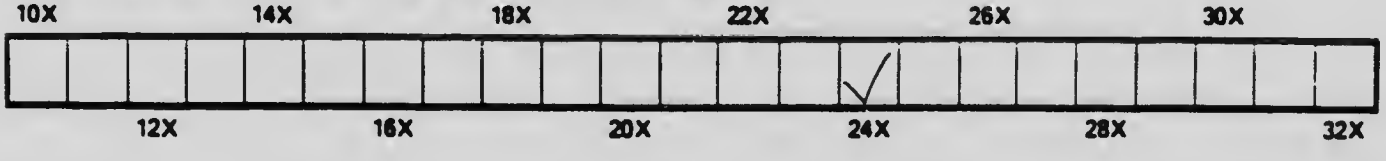

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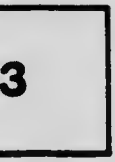

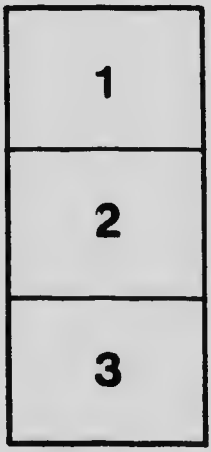

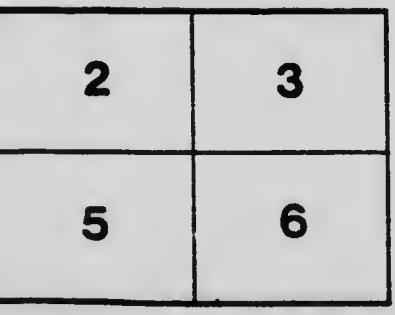

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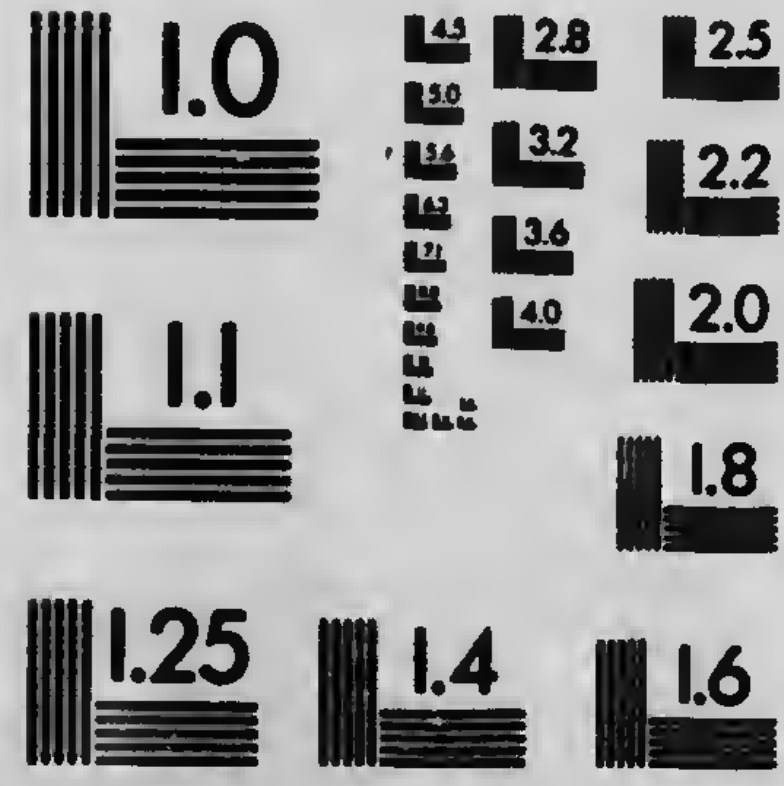

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Chronic Ulceration of Stomach Simulating Cancerous Disease

RELATION OF A CASE OF GASTROENTEROSTOMY WITH MURPHY BUTTON & RECOVERY

...BY...

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AND

E. B. O'REILLY, M.D., HAMILTON, ONT.

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CHRONIC ULCERATION OF STOMACH SIMULATING CANCEROUS DISEASE—RELATION OF A CASE OF GASTROENTEROSTOMY WITH MURPHY BUTTON—RECOVERY.

BY JAMES F. W. ROSS, M.D., TORONTO, ONT.,

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E. B. O'REILLY, M.D., HAMILTON, ONT.

In the short paper presented an effort will be made to impress upon the profession the fact that even after the abdomen has been opened it is difficult, if not impossible, to make a differential diagnosis between chronic ulceration and cancerous disease of the stomach. Our methods of diagnosis are very faulty and insufficient. Early diagnosis in either of these conditions is as yet almost out of the question.

Fagge says: "A case in which well-marked symptoms have existed for eighteen months, or longer, may generally be pronounced to be one of simple ulcer of the stomach, and not a case of malignant disease. On the other hand, cancer of the stomach may, for the most part, be diagnosed whenever the characteristic tumor is discovered accompanying the usual symptoms met with in these cases. Cases of simple ulcer affecting the pylorus have now been placed on record, in which this part has been so thickened and indurated that the presence of a scirrhous mass has been simulated."

Miss D. W., aged 28. From the patient's own statement it appears that she consulted a doctor regarding the condition of her stomach, with which she had been troubled for about three years. At times she felt perfectly well, and then again suffered from considerable discomfort after eating food. This discomfort frequently ended in vomiting. The vomited material was very sour and had an unpleasant odor. She found that raw fruits and any acids disagreed with her. She craved for sweet things. Her skin felt dry; the bowels were constipated. She entered the training-school of a hospital in April, 1899, and the gastric condition grew worse.

In August, 1899, she found it necessary to go home. She was then treated until December, but without benefit, in fact she seemed to be steadily growing worse. The abdomen became distended and pains set in in the back, and there was a great deal of soreness about the waist. Shortness of breath came on, and she found it necessary to sit up in order to get her breath. The pa-

tient then came under the care of Dr. E. B. O'Reilly, Hamilton, Ontario, whose notes are now given.

"The patient first came under observation in December, 1899. It was found that she had been, for some months, under treatment for dyspepsia. She was emaciated, and complained of suffering and pain whenever food was taken. Opium had been administered to relieve the pain, and the opium habit was already formed. Physical examination revealed nothing. Food was peptonized. In spite of this and the careful medication the symptoms again became aggravated.

"In January, 1900, after consultation with Dr. Griffin, the patient was sent to the Hamilton Hospital. Efforts were made to prevent fermentation of the stomach contents; rectal alimentation was persevered in with considerable benefit. The pain subsided and the patient gradually gained in weight. On March 24th, 1900, she was discharged from the hospital, and remained fairly well for two weeks, but as soon as food was passed into the stomach the symptoms again became aggravated, the pain returned, and the flatulence and nausea became troublesome. Great rigidity of the right rectus muscle was noticed. There were several profuse hemorrhages from the stomach and bowels. Exploratory incision was strongly urged. There were five severe hemorrhages in all.

"In April the patient grew worse daily. About the middle of May, 1900, as Dr. Ross was in town, I asked him to see the case with me. He also advised exploratory operation. The urinalysis showed the urine to be pale in color; sp. gr. 1.018; alkaline reaction; no sugar or albumen; slight mucoid sediment, with a few pus cells."

Dr. Ross' notes are as follows: "The patient was found, in May, 1900, extremely emaciated, rigidity of the right rectus muscle was noticed, and an indefinite thickening could be felt in the epigastric region. As the patient was only twenty-eight years of age, and as malignant disease of the stomach is rather rare at this period of life, there appeared to be good ground for hesitating before making an exact diagnosis. Diagnosis of ulcer of the stomach had been made when the patient was in the Hamilton Hospital in January.

"The symptoms pointed to obstruction of the pyloric end of the stomach, and it was not possible to say whether this obstruction was due to the presence of cancerous growth or to some other cause. The symptoms had extended over such a period that they pointed to the presence of an ulcer, but the thickening that could be distinctly made out led to the belief that, in all probability, malignant disease had been grafted on to the former condition of ulceration.

"There was no history of cancerous disease in the family.

Some dilatation of the stomach could be made out, but there was not the enormous dilatation so frequently found in cases of cancerous obstruction of the pylorus. The rhythmic muscle waves, so characteristic of pyloric obstruction, were not observed."

On the 5th of June, 1900, operation was performed by Dr. Ross, assisted by Dr. White. The abdomen was opened above the umbilicus and the stomach drawn out. A large growth was found at the pyloric end. The perigastric lymphatic glands were enlarged and the whole stomach wall looked exactly as it does in cases of cancer. The case was looked upon as hopeless, and a decision was arrived at not to attempt to remove the growth, but to give temporary relief by means of a gastroenterostomy.

The operation was rapidly performed by means of a large Murphy button and an anastomosis effected between the stomach and duodenum. The patient was not in a good condition owing to the previous starvation. The operation had to be performed rapidly to prevent collapse. Great care was taken, however, notwithstanding the necessity for haste, to carefully supply supporting sutures to prevent leakage. After the operation there was not much elevation of temperature or pulse. Patient made an uninterrupted convalescence.

On the 2nd of May, 1901, eleven months after operation, the patient weighed 140 pounds, looked the picture of health, and was just returning to complete her training as a nurse. On examination of the abdomen no mass could be felt. The patient was not suffering from any gastric symptoms.

Fagge says further: "That even when the symptoms point clearly to the existence of serious organic disease of the stomach there always remains the question whether this disease is simple chronic ulcer or cancer. Between these affections the diagnosis is often perfectly easy." And he might have added that it is sometimes extremely difficult.

In the case recorded there was no perforation with the formation of abscess cavity, such as is occasionally found to simulate cancer very closely.

An extremely interesting case is recorded by Sidney Martin and Bilton Pollard, of hour-glass contraction of the stomach with pyloric stenosis. This case helps to throw considerable light on the condition under discussion. The stomach was completely divided so that there was a larger right pouch and a somewhat smaller left pouch, formed as a consequence of the constriction across from the greater to the lesser curvature about its middle. A careful examination, *post mortem*, showed the presence of a chronic ulcer at the hour-glass constriction that apparently had excited persistent contraction of the circular muscular fibres, and led, with the formation of fibrous tissue, to permanent stricture similar to those strictures of the rectum produced by small ulcers.

The pyloric stenosis that was also present seemed to result from the presence of a small duodenal ulcer with perforation, and the consequent formation of a small abscess and a large amount of cicatricial tissue between the pylorus, the duodenum, and the transverse colon. The symptoms in this case lasted over a period of ten years.

In the case of Miss D. W. the stomach was drawn out and was not adherent.

In a very interesting article, Moynahan says: "The induration in some cases of ulcer may be of such density that the appearance and characteristics of the malignant growth may be mimicked with remarkable intensity. In one case of my own, which I submitted to the operation of gastroenterostomy, believing the pyloric mass to be malignant and not removable, the patient gained so rapidly in health, and has so stoutly maintained his improvement for a period extending over two years, that I am skeptical as to the accuracy of my diagnosis."

Thayer, Hirsch, Lindstrom, Kammerer and others have mentioned examples precisely similar, and Mayo Robson has recorded a case of pylorectomy for supposed malignant disease, which, on minute examination, proved to be chronic inflammatory thickening.

In an interesting article by Satterthwaite, a description of the ulcers is given. He says: "A large number of gastric ulcers have rounded contour, sharply cut edges, surrounded by a zone of tough fibrous tissue. A puckering of the gastric walls about them is present, and bands of fibrous tissue radiate outwards."

This variety has been called the acute. In contradistinction to this is the chronic variety, which has greatly infiltrated walls and ragged, shelving edges, forming a sort of inverted cone, the apex being at the peritoneal covering of the stomach. When exposed to the eye there can scarcely be much mistaking such an ulcer, though it might be taken for a cancer or sarcoma. A microscopic section of such a mass might be taken for a round-celled sarcoma, because in both sarcoma and gastric ulcer there is a great similarity of the character of the round cells. But, if the non-malignant ulcer is brought into view the peculiar excavated centre should indicate its true character."

Satterthwaite's observation in this connection may be quite correct, but it must be difficult for a surgeon to get such a view at the time of operation unless a very large opening is made into the stomach wall.

Symptoms.—The ordinary symptoms of ulcer of the stomach are localized pain after eating, vomiting, hematemesis or melena, or both.

Pain.—The pain at first is often only an epigastric distress. Later on it becomes of a boring character, going through to the

back. When the stomach is empty there is little, if any, actual pain, but when filled with food there is apt to be some immediate distress, and after a couple of hours pain increases and is no doubt due to increased acidity from the pouring out of hydrochloric acid. The patient often obtains relief after vomiting, or after the food has been carried on through the pyloric end.

In many cases hematemesis is the first sign of gastric ulcer. It must be remembered that hematemesis may occasionally be fatal, apart altogether from the presence of gastric ulcer or gastric cancer, in such cases arising from chronic alcoholism and cirrhosis of the liver.

Many cases of perforation of gastric ulcer are on record, in which none of the symptoms of the condition were present previous to the sudden onset of the symptoms of perforation.

Dr. Soltau Fenwick thinks that anemia, with progressive emaciation and great loathing for food, with signs of subacute gastritis, are generally suggestive, at an early period, of cancer of the stomach. He says that in 100 cases of carcinoma of the stomach 60 affected the pyloric end, 30 the walls, and 10 the cardiac end. Pain was present in 90 per cent. of the cases. It was generally constant and scarcely relieved by vomiting, and was very liable to severe exacerbations. The vomiting varied a great deal with the seat of the disease. Hematemesis was usually slight and repeated melena rare. In physical examination auscultatory percussion was especially valuable.

Diagnosis.—The period of greatest frequency of ulcer is from the ages of twenty to thirty years. There can be no doubt that cancer of the stomach is met with at an early age. The age of the patient cannot, therefore, be considered as of much assistance in making a diagnosis.

In the differential diagnosis of these cases but little advance has been made, as has already been stated. All that can be said regarding the absence of hydrochloric acid is that it makes us suspicious of cancer. Hydrochloric acid is found sometimes in excess in cases of gastric ulcer. Lactic acid only appears late, and as a consequence of pyloric obstruction.

The greatest aid to early diagnosis is exploratory incision. Kocher advocates a more extensive use of the exploratory incision in doubtful cases of gastric diseases. He says that he has often regretted the delay in operating, but has never regretted doing the operation itself. He considers that the indications for operation in simple ulcer are repeated hemorrhages, even if small, especially if dilatation of the stomach is present; secondly, for violent pain and for frequent vomiting, when caused by retention from pyloric obstruction; thirdly, for perforation; and fourthly, for the possibility of the condition being not simple, but cancerous.

It would be well to add "for the possibility of the condition

being not cancerous but simple." Surely this is a more important indication for operative interference.

Guinard holds that, under two conditions, exploratory operation is justifiable: first, when there is distinct modification of gastric chemistry, especially apepsia and the presence of lactic acid after a test-meal; and, secondly, complete failure after careful dietary and medical treatment to keep up the weight of the patient's body to its normal standard, or to restore lost weight.

The indication for operation, given by some, is that it should be performed in the absence of hydrochloric acid when lactic acid is present, and when there is reduction in the amount of albumen digested.

It seems to be apparent that before long the practice will be to perform an exploratory operation in all cases of doubtful stomach affections.

Operation.—Chronic ulcers, with thickening simulating malignant disease, are cured by a simple gastroenterostomy. The removal of cancerous growths is a very formidable procedure, and not a very satisfactory one. To be satisfactory it must be performed very early in the disease before lymphatic infection has taken place.

Barling condemns the proposal to excise gastric ulcer which has not perforated.

Kuster opened the stomach in two cases and applied the actual cautery to the ulcer, and then performed gastroenterostomy. The performance of gastroenterostomy, without the application of the cautery, would no doubt have been sufficient to effect a cure. His operations were performed for what I have described as the acute ulcer, and not for the form under consideration, chronic ulcer with tumor mass. The excision of such a mass is an unjustifiable procedure.

It would be well to attempt to cure this simple acute ulcer by plication of the stomach wall. In this way the irritation of the food would cease to be a factor, and the ulcer would be given an opportunity to heal. The operation would be an extremely simple one, and would be accompanied by very little danger.

After Results of Gastroenterostomy.

After gastroenterostomy the stomach, if previously largely dilated, reduces in size in a very short time. There may be difficulty produced by a narrowing of the new orifice, but if the operation is properly performed this is not likely to occur. As a consequence of the operation both bile and pancreatic juice must find their way into the stomach, but they evidently do no harm.

Pyloric spasm is produced as a consequence of the presence of a gastric ulcer. After gastroenterostomy the hyperacidity of the stomach disappears, and the ulcer heals as a consequence of the rest obtained by the organ and the cessation of the spasm.