LATE RESULTS OF CHRONIC GASTRIC ULCER TREATED MEDICALLY.

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IN order to throw light on the late results in cases of chronic gastric ulcer treated by medical methods without operation, the records of patients admitted to the wards of Guy's Hospital from 1914 to 1922 have been examined.

The difficulty of proving the presence of a gastric ulcer is often considerable—the only absolute proof is afforded by handling the viscus at operation or on the *post-mortem* table. The next best confirmation of the diagnosis is the positive result of an x-ray examination; failing this, we are reduced to ordinary clinical methods, which, however, are not infallible.

The cases selected from the reports were those in which x-ray examination revealed definite evidence of ulceration, usually by the presence of a crater. Four cases were used where a laparotomy had been performed, but no operative treatment on the stomach had been undertaken owing either to the position of the ulcer or to the adhesions around it; in three of these cases the ulcer was high up on the lesser curvature.

During the eight years covered, 79 cases were found which gave x-ray evidence of ulceration, and were followed up. The smallness of this number compared with the total admitted with the diagnosis of gastric ulcer is to be explained by the fact that in the reports of some of the cases no mention was made of the x-ray findings, and in others no x-ray examination was made—for example, in haematemesis. By studying cases with positive x-ray findings the position of the ulcer could be defined, and an attempt made to ascertain results of treatment relative to the position.

Each patient was sent a printed form on which questions as to the subsequent history of the abdominal condition were set. Where possible an interview was arranged, when the answers could be supplemented and the stomach screened. From the 79 cases so selected 57 replies were received; 16 could not be used owing mainly to operative intervention. There remained, therefore, 41 cases, and 32 interviews were obtained and the stomachs screened. The results were arranged in the following groups:

- A. Absolute freedom from symptoms since leaving the hospital—9 cases (22 per cent.).
- B. Marked improvement had resulted and persisted as a result of hospital treatment in 9 (20 per cent.). This group also included those who were very much better and who had a negative x-ray examination in 1925.
- C. The number *in statu quo ante* was 19.
- D. The symptoms had become worse in 4.

The percentage of A and B together was 42; of C and D together 57.

These percentages may be compared with the late results found by Dr. Conybeare in 39 cases of gastric ulcer treated surgically at Guy's.¹

Medical Cases.		Surgical Cases.	
Group A	... 22%	Group A	... 38.0%
Group B	... 20%	Group B	... 20.0%
Group C	... 57%	Group C	... 17.5%
Group D	... 57%	Group D	... 22.5%
... 42%		... 58%	
... 57%		... 40%	

The results, analysed in regard to position, are as follows:

Ulcers in the Cardiac Third of the Stomach.—Six cases were obtained; of these, 4 were in Group A and 2 in Group B.

Ulcers in the Middle Third of the Stomach.—Number of cases 27. In Group A there were 2 cases (7 per cent.); in Group B 3 cases (11 per cent.); in Group C 17 cases (63 per cent.); and in Group D 3 cases (11 per cent.).

Ulcers in the Pyloric Third of the Stomach.—Number of cases 10. In Group A there were 3 cases (30 per cent.); in Group B 4 cases (40 per cent.); in Group C 2 cases (20 per cent.); and in Group D 1 case (10 per cent.).

It has been stated that the result of medical treatment varies with the duration of the symptoms, and presumably the chronicity of the ulcer. In this series the length of history of the cases was as follows:

Cardiac Cases.—Those in Group A had a history of 3 years, 10 years, 3 months, and 2 weeks respectively; those in Group B of 2 years.

Mid-Gastric Cases.—Of the two cases in Group A, one had a history of 11 years, the other of 6 months. Of those in Group B there was a history of 9 years, 12 years, and 12 years respectively. Of the Group C cases symptoms had been present for 20 years in one case; for 17, 11, 9, 7, and 6 years respectively in five cases; for 5 years each in four cases; for 2 years in one, 1½ years in one, 1 year in each of five cases; for 2 months in one, and for 1 week in one. Of the three cases in Group D, one had a history of 9 years, one of 5 years, and the third of 1 year.

Ulcer in the Pyloric Third of the Stomach.—Symptoms had been present in the three cases in Group A for 15, 7, and 4 years respectively; in the four cases in Group B for 15, 14, 9, and 3 years respectively; in the three cases in Groups C and D for 15 years in one, and for 1 year each in the other two.

The above does not show any constant relationship between the duration of the condition before treatment and the ultimate result. Thus in the mid-gastric group, seven cases unrelieved by treatment had histories of one year or less. Krohn,³ discussing the results of medical treatment in 200 cases of gastric ulcer, came to a similar conclusion.

Relation of Results and After-treatment.

The patients were practically all of the artisan class, in whom dieting and the regular taking of medicines is likely to prove irksome if not impossible. It was found that no dieting was practised save during the bouts of pain, when meat, etc., was avoided, and bismuth taken. This absence of prolonged after-treatment may help to explain the failures.

Conclusions.

1. Very optimistic claims are made from time to time for the results of medical treatment of ulcers. It is interesting to note the results given at roughly ten years' interval: Joslin² in 1899 gave 40 per cent. well at the end of five years, and in 1914, 39 per cent. Krohn³ in 1924 gave 48 per cent. in patients over 40 years of age. These authors include gastric and duodenal ulcers in their figures. The 48 per cent. well or very much better of this series would agree with the above. The treatment of gastric ulceration has changed in the last thirty years, but this change is not reflected in my figures.

2. The impression that the chances of successful treatment of an ulcer with a long history are poorer than in one of short duration does not receive support in this series.

3. The cardiac cases, although very small in number, give a good result for medical treatment.

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REFERENCES.

- ¹ Conybeare: *Guy's Hospital Reports*, 1923.
- ² Joslin: *Journal of American Medicine*, 1899; *ibid.*, 1914.
- ³ Krohn: *Norsk Magazin for Laegevidenskaben*, 1924.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL.

RUPTURE OF THE RECTUS ABDOMINIS MUSCLE.

TRAUMATIC rupture of the rectus abdominis is a rare condition, though one easily diagnosed. It has been recorded as occurring in tetanus, and there is a specimen in the museum of the Royal College of Surgeons in which the muscle has been completely torn across as a result of a tetanic spasm. Severance of a few fibres of the rectus muscle is probably not uncommon, and after labour a peculiar tumour, really a fibroma, occasionally occurs, which is traumatic in origin.

A woman, aged 35, an acrobat, was admitted to the Leeds General Infirmary on January 23rd, 1927. Ten days before admission, while performing a trick, she had experienced a sudden severe pain in the abdomen which compelled her to give up her performance that night, which was a Saturday. The following week she managed to perform some of her less arduous tricks, but on the Saturday of that week she again hurt herself and had to give up her work and to seek admission to the infirmary. There was marked tenderness over the rectus abdominis muscle just below and to the outer side of the umbilicus and slight swelling. Above this a distinct gap could be felt occupying about half the transverse extent of the muscle. This became visible on the patient raising her head. Operation was recommended and carried out. An incision was made over the injured area and the rectus sheath exposed. This was opened and the muscle was found torn through about half of its extent. The gap, which was three-quarters of an inch wide, was filled with blood clot.