TREATMENT IN GENERAL PRACTICE

This article is one of a series on the management of some diseases of the digestive system met with in general practice.

THE SURGICAL TREATMENT OF PEPTIC ULCERS

BY

Sir JAMES WALTON, K.C.V.O., M.S., F.R.C.S.

The fascination, and indeed the difficulty, of medicine lies in the fact that even when a diagnosis is established with certainty there is no clear line of treatment. Whether we realize it or not, with every patient we have to balance most carefully the risks of one method against those of another. In a young, healthy patient an operation may be a procedure of very little risk, and may save him from very grave disability and many dangers in after life. On the other hand, surgical intervention for a precisely similar lesion in a weak, elderly patient may be a most hazardous procedure to life, and greatly outweigh the risk of the underlying disease.

In patients with peptic ulceration there may be a great diversity of risks, so that it is impossible to make dogmatic statements as to the line of treatment to be carried out in an individual case; moreover, many different opinions have been expressed as to the routine methods to be adopted. Fortunately to-day, as our knowledge increases, the views of physicians and surgeons are more closely approximated, and certain general principles are being accepted.

Selection of Cases

In the case of an uncomplicated gastric ulcer the first essential lies in an exact diagnosis of the nature of the lesion. Although in well-defined cases there is a sharp distinction between the symptoms and physical signs of an acute and chronic lesion, there are borderline cases in which this distinction is not so clear, so that every care has to be taken in obtaining the history and in investigating the condition of the stomach. When acute erosions or small subacute ulcers are present no operation should ever be considered. Patients are not infrequently sent to the surgeon with the statement that pain or vomiting has persisted in spite of medical treatment, and an operation is requested. In such instances the medical treatment has generally been incomplete, and the symptoms will always yield to a sufficiently rigorous regime. But even if this were not so, it is almost certain that no surgical measures would give relief in the absence of a demonstrable lesion.

With single chronic ulcers agreement as to the value of medical treatment is not unanimous, but probably every surgeon would agree that no operation should be undertaken until an adequate course of medical treatment has been tried. Many surgeons may believe that a long-established deep ulcer will not yield to such therapy, or that, if relieved, the condition will recur when the patient returns to his normal life. Provided, however, that no complication is present no harm can arise during the course of such treatment. The younger the patient and the shorter the history the more likely are medical measures to be successful. It is essential, however, that the diagnosis be accurate. The chief, and in fact the only real, danger of medical treatment is that a patient with a short history of loss of appetite, loss of energy, and discomfort, is diagnosed as a case of chronic ulcer after x-ray examination when he is in reality suffering

from carcinoma, and the only opportunity of a cure by surgery is allowed to pass. The same considerations are true in the case of a chronic duodenal ulcer, but here the danger of the presence of carcinoma is almost non-existent.

If an adequate course of medical treatment fails to give relief, if the symptoms return as soon as the patient undertakes his normal life, or if the restrictions placed upon his work and diet after the immediate cure are too onerous for his position in life, surgical intervention must be thought of. This latter consideration is of great importance with many of our hospital patients. Many men upon whom I have operated are stevedores and dock labourers. They cannot take milk or eggs to their work; their midday meal consists of a piece of meat, bread and cheese, and probably beer. If they cannot take such food they are unable to continue with their work.

Type of Operation

The nature of the operation differs in the hands of various surgeons. Some believe that all peptic ulcers must be treated by excision of the greater part of the acid-secreting portion of the stomach. My own view is that the routine use of so extensive an operation carries too high a mortality, gives a relatively large risk of subsequent anaemia, and does not entirely free the patient from the danger of recurrent ulceration. For these reasons I prefer to treat duodenal ulcers by a posterior gastro-enterostomy, which has a risk to life of less than 1 per cent., and to reserve partial gastrectomy for the patients—in my own experience between 3 and 4 per cent.—who later develop gastro-jejunal ulceration. For gastric ulceration, gastro-enterostomy is rarely sufficient, and should be employed only for patients who are gravely ill, where it may be a temporary or palliative measure. In the greater number I have obtained the best results by a resection of the ulcer combined with gastro-enterostomy, but I perform partial gastrectomy for large ulcers and for those with the slightest evidence of carcinoma.

Peptic ulcers may be associated with mechanical changes. A long-persistent duodenal ulcer may cause fibrosis and narrowing of the intestinal lumen, leading to the so-called pyloric stenosis. An ulcer on the lesser curve, if it occurs in a woman subject to visceroptosis, may give rise to a zone of fibrosis which, passing to the greater curve, contracts the stomach and causes an hour-glass narrowing; this may also be associated with ulceration and fibrosis at the pylorus. These complications usually manifest themselves by the presence of vomiting. It is evident that no form of medical treatment can hope to overcome fibrosis and narrowing of this nature, and operative treatment must be advocated.

It is for the stenosing ulcers of the duodenum that gastro-enterostomy yields the most satisfactory results with a very low mortality; hence it should be the operation of choice. Some surgeons prefer a plastic operation such as gastro-duodenostomy, but it is a measure which has not gained much favour in this country and seems to have no advantage over posterior gastro-enterostomy.

When an hour-glass stomach still has a relatively wide isthmus I prefer to perform a wide wedge resection with a gastro-enterostomy running along the greater curve, as this has a low risk and does not remove a large portion of the normal stomach. If the isthmus be very narrow

a partial gastrectomy must be done, an operation which many surgeons perform as a routine measure for this lesion. All the older plastic operations are unsatisfactory, in that they leave the active ulcer untouched.

Although there is still a good deal of discussion as to the frequency of carcinomatous changes in a chronic ulcer there is no doubt that this complication may arise. Hence if the symptoms have altered in character—the last attack being longer, the pain less severe but more persistent throughout the day, the vomiting more frequent but giving less relief, and the appetite poor—the onset of carcinomatous changes should be diagnosed and an operation performed at the earliest opportunity. In such cases a partial gastrectomy should always be carried out.

Perforated Ulcer

A perforation of a gastric or duodenal ulcer may take place in a patient who has already been under treatment for symptoms recognized as being due to a chronic ulcer, or it may be the first symptom for which the patient has sought advice. My own experience has been that such perforations nearly if not always occur with chronic ulcers, and that a past history of the symptoms of such a lesion can usually be obtained. The sudden onset of severe and constant pain and the characteristic rigidity of the abdomen will almost always lead to a definite diagnosis even in the absence of shock and in the presence of a normal or slowed pulse rate. When a perforation is present an immediate operation is demanded, and the credit of the enormously improved results in recent years belongs more to the practitioners who have made an early diagnosis than to the surgeons who have carried out the operations.

The essential step consists in suture of the perforation. If the peritoneal cavity contains much stomach content it should be drained. My own opinion is that ulcers that perforate are chronic in nature, and that a suture alone will rarely lead to a complete cure. Thus if the patient's condition is good a gastro-enterostomy should be performed at the time, but if he is gravely ill, or if the surgeon feels that he cannot perform the anastomosis rapidly, he should be content with suture, but should carefully watch the patient after recovery for symptoms of persistent ulceration.

Operation for Haematemesis

One of the most difficult complications of peptic ulcer that the practitioner has to treat is the presence of severe haematemesis. Theoretically it should be prevented by adequate treatment of the ulcer, but many patients, although subject to chronic indigestion, do not seek advice until the onset of the haematemesis. Each case must be considered a problem in itself, and no definite rule can be laid down. The haematemesis is often so severe that the patient's life is in grave danger; he may indeed die within an hour or less, so that any operative intervention becomes a matter of extreme risk. On the other hand, if the perforated artery be left it may continue to bleed or may bleed again at a later date.

The bleeding may arise from a small artery that is perforated in the base of a minute erosion which it is impossible to find at operation. Hence the majority of physicians and surgeons are of the opinion that no operation should ever be carried out for the bleeding in acute ulceration. I feel, however, that there are a few exceptional cases in which the bleeding has recurred in spite of strict medical treatment, and in which the patient's life might be saved by operation. In such instances no attempt must be made to seek for the bleeding point, but the pylorus should be temporarily occluded and a gastro-enterostomy performed. If the surgeon does not feel that such indirect measures will control the haemorrhage he should not operate.

In a chronic ulcer the haemorrhage is usually controllable unless a large vessel such as the splenic or coronary be eroded, in which case the patient generally dies before treatment can be instituted. As a rule, therefore, he should be put to bed, be given morphine, and no food must be taken by mouth. A very useful measure, however, is to give one drachm of adrenaline in one drachm of water hourly by mouth; this will often control the haemorrhage until the vessel is sealed. When it has ceased the patient will only be allowed fluid, and ultimately food, by mouth, in very slow stages.

In exceptional cases operation may be required at once, but generally it should be reserved for patients whose haemorrhage is not controlled by medical means. If performed it should only be carried out after a blood transfusion, and in most cases it will have to consist of some local measure to the ulcer. If the haemorrhage is from the duodenum, the lumen may generally be entirely occluded, and thus the haemorrhage in any area controlled, by a well-placed mattress suture, the insertion of which is followed by a gastro-enterostomy. An ulcer on the lesser curve may be excised or the bleeding sometimes controlled by ligatures around the ulcer. In those cases which have been controlled by medical treatment an operation should be considered as soon as the patient's condition warrants surgical intervention.

TRISTAN DA CUNHA

A VISIT TO THE LONELY ISLAND

BY

E. F. D. OWEN, M.R.C.S., L.R.C.P.

SURGEON R.M.S. "EMPERESS OF AUSTRALIA," CANADIAN PACIFIC STEAMSHIPS

During the recent cruise of the *Empress of Australia* I had the good fortune to make my second visit to this very interesting island. The purpose of the visit of the vessel was to land stores and food. The island receives a visit from a ship about once a year, these calls being the only communication the islanders have with the outside world. The island was discovered in the year 1506 by the famous Portuguese sailor Tristan da Cunha. It was not inhabited, however, until 1816, when it was settled by seven men belonging to H.M.S. *Falmouth*. Two of the men took their wives along with them from St. Helena, and later five coloured women were sent from St. Helena, to become the wives of the other five men. At the present time seven surnames are to be found—Glass, Swain, Rogers, Hagen, Green, Lavarello, and Repetto. The total population is 169, of which ninety-three are males and seventy-six females. In addition there is one parson, who serves a term of residence of three to four years.

All the cottages I visited were exceptionally clean and tidy. Gramophones were in several, and dance music appeared to be the favourite form of music. The parson, apart from his pastoral duties, acts as doctor, dentist, schoolmaster, scoutmaster, and general adviser to the community. Money is unknown in this lonely island, all trading being done by barter. The people are governed by a Parliament, which meets every Saturday night. This consists of the "Chief," who is appointed by the populace, the parson, and the eldest male in each family.

The Inhabitants

The women appeared to be far more intellectual than the men. They were quicker in movement and thought, and took a greater interest in what was going on: the men were lethargic, and without the driving force of the parson would be lazy. The women appeared clean in spite of the fact that soap is an article of rarity. They are fond of loud colours, and their style of dress is that of 100 years ago. The men did not appear so clean and tidy. All the men and women are slim and of average height; not one stout person was seen. The children were