A Lecture

ON THE

TREATMENT OF GASTRIC ULCER.

DELIVERED IN

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BY

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GENTLEMEN,—In to-day's lecture we have to consider the treatment of ulcer of the stomach; but, before doing so, it may be well for us briefly to review the condition of the diseased viscus. In all cases of gastric ulcer we have an ulceration of the lining membrane of the stomach of greater or less depth and superficial area, and with this in many cases we have more or less congestion of the mucous membrane in the neighbourhood of the ulcer, accompanied often by a state of catarrh. We have also irritability of the stomach; so great in some cases, that all food is rejected almost as soon as received; while in others, the ingestion of food causes intense pain, which, instead of being relieved by vomiting, may pass away only when the ingesta are transmitted into the duodenum. The viscus is thus either partially or almost completely disabled; and, as the proper performance of its functions is of vital importance to our patient, so the treatment that we adopt is necessarily of the highest moment. The existing conditions point out to us two grand principles to be followed; viz.:

1. To promote the healing process by removing all local impediments to the cicatrisation of the ulcer, and by aiding the constitutional powers.

2. To alleviate, as far as possible, the distressing symptoms of the disease. (*Vide Dr. Brinton, On Diseases of the Stomach*, p. 165. Second edition.)

Now, if we consider for a moment the offices which the stomach is commonly called upon to perform in order to support life, we must at once perceive how difficult it necessarily is to fulfil the first of the two great indications afforded us. And if we further think of the process of digestion, the chief symptoms of the disease—the pain, the vomiting, the hæmorrhage, the cachexia—cease to be only alarming, and become to the eye of the physician the almost necessary consequences of overtaxing a damaged organ. We cannot wonder that the stomach cries out in its clearest and most unmistakeable manner whenever its surface is irritated by food, and refuses with all its energy to perform functions which, in their very process, irritate the disease that frets it.

If we analyse for a moment the digestive act, we at once recognise several circumstances interfering with the healing of the ulcer, which we may arrange thus:

1. The movement and great changes in volume of the stomach necessitated by the ingestion of food.

2. The mechanical and chemical irritation to the surface of the ulcer produced by the food.* (*Vide Dr. Budd, On the Organic Diseases and Functional Disorders of the Stomach*, p. 138.)

The very functions, then, which it is the duty of the stomach to perform, and which are essential to life, are opposed to a great extent to the healing process which we have to promote. Do not understand me to say that no ulcer can heal so long as the stomach is called upon to act, for such an assertion on my part would be opposed to clinical and experimental facts; but rather that the process of digestion interferes much, in cases of gastric ulcer, with the efforts made to repair the lesion. Consider how, in the case of a cutaneous ulcer, similar irritation would act; and how quickly the surgeon would set about removing all such obstacles to healthy action. In the pain caused by the irritating substances and the movements of the part would be discerned the voice of Nature calling for rest; and, on rest being obtained by the removal of all causes of disturbance, the healing of the surface-ulcer would quickly progress. Rest is as essential to repair as it is to growth; for repair is growth, directed, not to development, but to restoration. (*Vide Mr. Hilton's Lectures on Rest and Pain*.)

Let us bear in mind this great fact, then, in our treatment of internal ulcers; for we shall find that, in all cases of gastric ulcer, our measures must be chiefly directed to procure rest for the organ—rest from all mechanical irritation—rest from all physiological action.

Every attempt to digest food in severe cases of this disease sweeps away, more or less completely, the results of that curative process which has been going on during the previous state of rest, and leaves the ulcer, if no farther, still often as far from being healed as ever. Our great therapeutical agent in the treatment of this affection is, I am convinced, “mechanical and physiological rest” (*vide Mr. Hilton's op. cit.*); and as this is more or less perfectly obtained, so we may divide our remedial measures into those which obtain *partial rest*, and those which obtain the most *complete rest* at our command for the organ. The milder cases of this malady we may treat by *partial rest*; and this we may obtain by regulating the diet of our patient.

We must rule, however, both the quality as well as the quantity of the food, and prevent any distension of the organ, while we guard against any irritation of the diseased surface. Simple and well ascertained physiological laws must guide us in our selection of food. We must recollect that certain forms of nutriment are more easily digested than others; and also that some substances—*e.g.*, protein compounds—specially require gastric digestion. Experience teaches that all food which takes much time and energy to be digested, or which is chiefly transformed in the stomach, proves most irritating to our patients. Animal foods, substances likely to irritate the viscus, hot ingesta, and particularly full meals, must be carefully avoided, as they all aggravate the patient's sufferings, and are frequently expelled. On the other hand, as we naturally might expect, bland food of an easily digestible form, of a

* I have not mentioned the action of the gastric juice as an impediment to the healing process, because I believe Dr. Pavy's experiments have proved that, under ordinary conditions, it has no corroding action on the surface of the stomach.

cool temperature, and in small quantities, is easily borne. (*Vide* Dr. Brinton, *op. cit.*, p. 183, 2nd edit.) In milk we have a fluid meeting all the requirements of the system, and at the same time possessing the qualifications above mentioned—at once the most easily digested and the most elaborately composed food. Sometimes, however, when taken alone, it is rejected; and in such cases it is often retained, if diluted with half its bulk of lime-water. This addition prevents more or less the action of the gastric juice upon it; and thus the milk is often passed into the duodenum, to be there digested. By regulating the quantity, however, we can usually ensure its favourable reception; and in many cases we find that the addition of the purer forms of starch, so as to increase its consistence, renders it much more grateful to the stomach. Arrowroot is the best form of starch to use at first. As the patient improves, corn-flour, sago, tapioca, and rice may be substituted; and thus the advance to more solid food most zealously guarded. The more easily digested forms of fish may be next allowed; and from these a most gradual return to the more ordinary forms of nutriment may be made. The greatest nicety of judgment, as well as the firmest control over your patient, must now be exercised; for a single excess will often produce a most serious aggravation of the symptoms. For some weeks after apparent convalescence must you guard your case; and the necessity of this is very evident, when you consider how easily the newly formed tissue covering the ulcer may be irritated.

Such is a brief statement of the treatment by *partial rest*, aided, of course, by such drugs as the urgency of any of the symptoms may require. I shall speak of these drugs in the latter part of the lecture, as their use is only occasionally called for. This treatment is what you may rely upon in the milder cases of the disease, such as we constantly see among the out-patients at the hospital; and you will generally have to adopt it in private practice. By it the stomach is favoured by *partial rest*; and the healing process gradually advances—slowly, however, on account of the frequency of the admission of food. In the severer cases of the disease, where the intense pain and tenderness point to probable perforation, where the irritability of the stomach causes all food to be rejected, or where hæmorrhage in large or moderate quantities indicates quickly advancing ulceration, I would rather have you obey the great principles which I have laid down more completely. I would have you obey as far as possible the indications which Nature shows you, and cease to irritate the organ by forcing it to receive food of which it as plainly as possible expresses its fear. The most rational and most successful treatment in such cases is to give the *most complete rest possible to the affected viscus by stopping the supply of all nutriment by the mouth, and supporting the patient for several days by nutritive enemata*. Perfect quietude in the recumbent posture must be observed; the lips and tongue moistened from time to time with a little water; and everything likely to excite the patient avoided. The body, thus placed in a position requiring the least expenditure of material, is easily supported for several days by enemata alone, even when the weakness of the patient makes the treatment seem hazardous. For eight or nine days the patient may be kept, if desirable, on enemata—even longer, if necessary; and during this time the pain, the irritability of the stomach, and of

the system, cease; and the sufferer enjoys ease to which he or she has long previously been a stranger. Far from becoming weaker, patients in general rally somewhat while under this system. When I first determined to try this method of treatment, I expected that great difficulty would occur in obtaining the cooperation of the patients; but I have found in all cases, with scarcely an exception, not only a willingness to submit to it, but scarcely a complaint during its continuance. The pain is generally so intense, and the patient, if hæmorrhage has occurred, so alarmed, that any treatment is willingly obeyed, especially one the *rationale* of which is so easily understood.

The substances which I have found most useful for enemata are milk, strong unsalted beef-tea, raw eggs beaten up in milk, occasionally a little brandy, and generally, in two enemata daily, ten to twenty minims of tincture of opium.* Feeding the sufferer thus, you gain for the stomach a few days' rest (generally six or seven); and then the symptoms have so much abated, that the treatment by *partial rest* can be adopted with success.

This interval of *complete rest* from all irritation—from all action—I consider of the greatest importance; and I have found it so beneficial in its results, that I would recommend you to treat all severe cases of this disease, whenever possible, by this plan. The ordinary method only partly fulfils the indications that present themselves; and in my opinion, and in my experience, renders the time occupied in the repair of the ulcer much longer. In the treatment by *complete rest* for a time, the patients rapidly advance towards health, and only remain under observation for about three or four weeks. A fortnight of restricted diet, after a week of perfect rest, is usually sufficient to restore the subject to comparative health. In all cases, however, it is essential to ensure, as far as in your power, a favourable form of diet for some short time longer.

I may here mention to you a case which, although not one of gastric ulcer in the ordinary acceptation of the term, nevertheless called for much the same line of treatment. I allude to a case of poisoning from a corrosive fluid (acid solution of chloride of zinc), now in No. 1 Ward of the Queen's Hospital. Gastritis and ulceration arising from causes like this you will often meet with; and, as I have in a previous lecture told you, they can be best treated by *complete rest*. This man had marked symptoms of gastric injury after he had recovered from the immediate effects of the poison. He was treated for some time on the restricted diet plan. The symptoms varied from time to time; but at last, after rather too full a meal, a severe attack of hæmatemesis occurred. Now thoroughly alarmed, he was glad to assist in any treatment that might prove beneficial, and for six days was fed by nutritive enemata given every two hours. From day to day he improved; the pain, the tenderness on pressure, disappeared; no hæmorrhage recurred; and when, after his long fast, he began his slight milk diet, no unpleasant symptoms followed. Ever since, the patient has done well, and advanced steadily towards health.

Cases of this kind, gentlemen, and the cases of gastric ulcer which you have seen treated in the hospital, speak more strongly and effectually than any

* The enemata should be as small as possible, from two to six ounces.

words of mine can in favour of a method of treatment which, by its simplicity and rational character, needs little argument to recommend it.

I have avoided as far as possible mentioning the drugs that are used for certain purposes in this disease, because I believe none of them are essential to us in promoting the first great object of our desire: I mean the healing of the ulcer. Certain symptoms, however, arise in the course of the malady; and, as in other diseases, the treatment of these symptoms forms often a great portion of our work. Rest for the organ has the effect of quickly diminishing the pain and allaying all irritability; and, if the rest be complete, these symptoms rapidly disappear. Perforation is best prevented by the treatment I have recommended; but, when it has occurred, the attention ceases to be occupied by the gastric lesion, and is concentrated on the resulting peritonitis. The hæmatemesis is, however, the symptom that we usually have to combat; and here, when it is copious, we often find drugs of great assistance. As we have usually time given us to check this hæmorrhage—for it is seldom immediately fatal—we can take a variety of measures to prevent its recurrence. When it occurs in small quantities, the recumbent posture, and rest as perfect as possible for the viscus, usually suffice to stop it. In most cases, ice in small rounded pieces may be swallowed. When the hæmorrhage is copious, I have usually found a mixture containing diluted sulphuric acid and gallic acid (ten minims of the former and five grains of the latter) in water, taken every two or three hours, the best remedy. Oil of turpentine—ten to twenty minim doses—has been strongly recommended. Acetate of lead with opium, alum, and tannin, may also prove useful.

As long as rest is observed strictly, the bleeding does not often recur; and this perfect rest, obtained as I have recommended, will usually be sufficient to prevent the return of this bad symptom. In treating patients, then, by the plan of *complete rest*, we not only place them in the most favourable position for the cicatrization of the ulcer, but we also, for the most part, fulfil our second great indication—the alleviation of the symptoms. Certain medicines are, however, useful to us in this disease, not so much as curative agents as auxiliaries to our great therapeutic agent—rest. Opium has deservedly the highest position on the list, and you will find it in this affection most valuable. Not only in allaying pain, in soothing the general irritability of the patient, but also by its action as a stimulant, and by checking the waste of the tissues, do we find it most beneficial. Mr. Skey's observations as to its efficacy in the treatment of cutaneous ulcers are equalled almost by the general praise which it receives from all authors who have written on gastric ulcer. I have usually given it in the enemata to my patients, as thus we, in addition to its constitutional action, gain its soothing effect on the rectum, and prevent that irritability of the gut which sometimes interferes much with the treatment by *complete rest*. In some of the milder forms of hæmatemesis, if you cannot altogether stop ingestion of food, you will find good effect from this drug combined with kino, as in powder of kino with opium.

Tonics are needed during the period of convalescence, to remedy the cachexia; though this symptom, for the most part, begins to disappear as

the healthy condition of the stomach is restored. You will find the milder preparations of iron and quinine the best. I usually prescribe five-grain doses of citrate of iron and quinine, in infusion of calumba. This latter is probably the most useful vegetable tonic infusion at our command. In the anæmic state, often so marked in our younger female patients, the ammonio-citrate and the potassio-tartrate of iron may be prescribed with benefit.

Bismuth, since its introduction by Odier, has enjoyed a considerable repute in the treatment of stomach-diseases. In this affection, you will often find it useful as an auxiliary to your after-treatment, allaying as it does the irritability of the stomach, and checking the pyrosis. (*Vide Dr. Budd On the Organic Diseases and Functional Disorders of the Stomach*, p. 332.)

With regard to the use of *aperients*, I must warn you that they are only necessary, as a rule, in the after part of your treatment. Occasionally they are required in the earlier stages, but at all times should be of the mildest kind. Castor oil is probably the best, and may be given in enema, in which form all purgatives are best exhibited. Mercurial preparations prescribed to this end have, as Dr. Brinton has well observed, a most injurious effect.

You will find many authors vaunting the use of nitrate of silver. Let me remind you, as I have often done before, how useless the administration of a drug must be whose composition, if not changed long before its arrival in the stomach, is converted into an insoluble chloride immediately it reaches that viscus. Its stimulant action on the ulcer itself cannot be insured till we can directly apply the unchanged nitrate. "The careful system of diet, which is usually adopted in conjunction with the remedy, is itself sufficient to account for all the benefits observed." (*Vide Dr. Brinton, op. cit.*, p. 182.)

PRURIENT EXHIBITIONS. We hope that the case heard a few days ago at the Marlborough Street Police Court will have the effect of putting an end to the dirty and prurient exhibitions which are set up in London under the pretence of affording anatomical instruction. A gentleman went into one of these places in town and found it full of "disgusting models," so disgusting that the reporter states his description of them "is unfit for publication." A creature stands at the door of this den inviting the passers-by to walk in, and almost laying hands on them to compel them, while the immediate neighbourhood is infested by men who thrust loathsome bills upon everyone they can get near. There is a part of the Strand, and thence to Temple Bar, which is a disgrace to London during the day, and at night it is hardly safe to pass along it. It is thick with the scum of the town. Sir Richard Mayne would be doing a public service by ordering more vigilance to be used in this part; and as for the detestable exhibition which pollutes the thoroughfare, if it cannot altogether be removed, surely the pavement can be kept clear of the vagabonds who are touting for the spirits, more evil than themselves, inside. Thousands of poor creatures are being driven about from hole to corner in order to make our streets respectable, while indecency is thus openly advertised and proclaimed. If the police did their duty, the nuisance could at any rate be so reduced that it should not be an insult and an offence to every one who walks by the doors. (*Pall Mall Gazette*.)