PSYCHOSOMATIC ASPECTS OF GASTRO-INTESTINAL DISEASES*

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Since the publication of Dunbar's book *Emotions and Bodily Changes* in 1935, there has developed a whole new subject of psychosomatic medicine. Let us ask ourselves how the increased interest in this subject during the past 20 years has affected the practice of medicine, in particular our attitude towards gastro-intestinal diseases. I must admit that my first impression is that it has not justified its early promise and that it has not really brought about any advance. All too often it has signified a change of name, providing new labels for old. The concept of the mind affecting the body (the soma and the psyche), is as old as medicine itself, and every good doctor has always tried to take psychological influences into account.

The last 20 years have not in any way seen a different or better attitude of the doctor towards the patient as a result of this psychosomatic teaching. In fact, if anything, the opposite has occurred. The increased introduction of mechanical and biochemical tests, on the one hand, and the budding-off of the specialties on the other, have inevitably led to a diminished interest of the doctor in the patient's emotional problems. He has neither the training nor the time and the orientation towards this approach. The common attitude is to employ all available tests and, when these have been exhausted and no obvious cause has been found for the patient's symptoms, to treat him perfunctorily as a neurotic. When his symptoms are very clamorous and facilities are available, the patient is referred to a psychiatrist.

So much for the negative picture. It is only fair to say that there is a very definite positive side to the picture too, viz. the emergence of what may be called experimental psychosomatics — the objective study of symptoms in relation to emotional states, spontaneous or induced. Thus there has emerged an increasing knowledge of the physiological changes and the nature of the symptoms in the study of such conditions as headaches, migraine, and many skin conditions of nervous origin, and of the effects of the emotions on the gastro-intestinal tract, the stomach, and bowel. In the case of the gastro-intestinal tract, by choosing a suitable subject (the case of Tom with a gastric fistula), Wolf and Wolff in America have attempted to correlate the emotional state with the physiological functions of the stomach — vascularity, motility, secretions, and the friability of the mucous membrane. Similar studies have yielded interesting and important results in the case of the colon. These results are valuable to show the correlation of emotions with symptoms, but to my mind they have not yet reached a stage where they can be applied to the treatment of these conditions.

There is, however, one aspect of psychosomatic experimental work which I should like to criticize, and that is the tendency for the investigators to theorize on inadequate evidence. Emotionally induced changes in the stomach, for instance hyperaemia, hypermotility, and hypersecretion, are closely similar to the state of the stomach in a patient with an active duodenal ulcer, but that does not necessarily mean that the lesion of duodenal ulcer can be *initiated* by frequent repetition of such emotional states. In the case of the colon the investigators also tend to argue from analogy and not from deduction when they are trying to prove that certain emotional changes *initiate* ulcerative colitis. It appears to me that very much more work will have to be done before such sweeping conclusions are justified.

The gastro-intestinal tract is richly supplied with nerves, and obvious changes in function so frequently follow emotional upsets that the knowledge of it has been a commonplace for probably thousands of years — even in the most primitive societies. Loss of appetite, vomiting, and attacks of diarrhoea frequently follow an obvious mental disturbance — an observation which has been so evident that every language contains phrases which illustrates it. Hence, merely to demonstrate that certain states of the mind lead to observable physiological changes in the gastro-intestinal tract is not enough; it is necessary to be more particular and specific. This really means that it is necessary to correlate familiar clinical syndromes with emotional states.

Peptic Ulcer and the Spastic-colon Syndrome

I now propose to discuss the nature of the emotional background in two common gastro-intestinal diseases, namely, peptic ulcer and the spastic-colon syndrome. I am not competent to deal with them as a trained psychologist would or rather should. I shall deal chiefly with the treatment aspect — that aspect with which we all as physicians or general practitioners have to cope in every one of our patients.

Before going on I should like to say that in mentioning peptic ulcer I am referring chiefly to duodenal ulcer, in which the nervous element is the most prominent and obvious. In the spastic-colon syndrome I am referring to cases of functional, so-called nervous dyspepsia, in which no organic disease has been discovered, and in which the signs and symptoms of this condition can be elicited. I should like to compare the two side by side, since there is a tendency among doctors to treat the nervous factors of all gastro-intestinal diseases in a similar manner, failing to realize that they may be produced by entirely different mechanisms.

The Nature of the Psychogenic Disturbance in Peptic Ulcer Compared with that in the Nervous Dyspepsias

A great deal of work has been done, in peptic ulcer patients, to determine the nature of the psychogenic factors involved. Much of this work, valuable as it is, only describes the personality of the patient who is liable to get an ulcer; less is known of the factors which initiate a new attack or cause a recurrence of ulcer activity.

The nervous dyspepsias occur as differing types and in so many people with dissimilar personality traits that one can say that psychological work in this group of patients has scarcely started. As a physician I have had to deal with both groups of patients for many years, and gradually I have discovered that certain factors that play a prominent part in one condition are of little importance in the other. The important observation which I have made is the following: superficially both conditions have certain factors in common. Patients may be worrying types in both cases and their symptoms are often aggravated by obvious nervous factors, yet the nervous factor is different. It is my impression that in cases of peptic ulceration the precipitating factor, presumably acting in a certain personality type, has been some mental strain which has been too burdensome for the patient. To quote instances: an engine driver doing much overtime; a student before an examination; a teacher when the inspector is due to come round; a bank official and an accountant at the end of the financial year; a businessman who has had to meet mounting financial obligations; or a traveller who has to undertake the selling of an extra 'line' with which he is unfamiliar.

In the nervous dyspepsia patient, on the other hand, careful enquiry will rarely lead to the identification of an event, or even a situation, which has precipitated an attack. When such a relationship is discovered it will be of a different nature. For instance, to quote cases again: a woman has severe diarrhoea within 24 hours after her husband dies; a man developed a severe attack of vomiting and pain when his fiancee broke the engagement; a young man when his father was sent to a hospital for a nervous breakdown; a woman develops abdominal pain and vomiting after a miscarriage; another on discovering that she is an adopted child and not the real daughter of her parents; a woman of fifty who had been

* This paper, which was presented by the later Dr. Mirvish, some years ago, to a meeting of the Association of Physicians of South Africa, is one of the many interesting documents found among his papers. It is published at the special request of some of his many friends and admirers who feel that this paper is of particular interest because it gives expression to the basic philosophy of a teacher and clinician to whom a patient was always a person and never a case — Editor.

promised a baby for adoption and was disappointed. Such cases where there appears to be an obvious relationship between cause and effect are, however, relatively few, and when they do occur it is always in patients who have previously been liable to similar symptoms.

I should like to point out that the great difference between these two sets of circumstances is that the first, occurring in the ulcer case, lends itself to both therapeutic and prophylactic treatment — the external strain on the patient is removed by lightening the burden of his working responsibilities. In the second group, however, we are faced with problems of personal unhappiness, occurring in people with disturbances of temperament, for which we, as doctors, can do very little to ameliorate or prevent.

In the course of handling the two groups of patients it becomes obvious that those with peptic ulcers can be very much improved symptomatically by simple means, which are in the power of the doctor to advise, as detailed below. In psychoneurotic patients, and especially in those who have the spastic-colon syndrome, it becomes obvious that the psychological factors present are both deep and complex and are best left alone by the attending doctor. Attempts at casual psychotherapy in such cases, or undertaking such measures as hypnotic suggestion, free association, dream interpretation, or similar measures, are useless and may actually be harmful. It is quite feasible that if these people were to be given a full and prolonged course of psychotherapy, they might lose their symptoms, but of that I cannot speak since I have not the experience.

TREATMENT

Physical Rest

In the ulcer patient physical rest is usually very important. This takes the form of advising the patient to rest in bed for the usual ulcer treatment for 3 - 6 weeks in severe cases. In milder cases the patient is taken off heavy duties and is given a sedative sufficient to allow him an extra couple of hours' sleep in the twenty-four. In intermediate cases the patient is told to go to bed in the weekends and when he gets home after work.

The spastic-colon patient is generally not put to bed, because this may have a most serious deleterious effect upon him. In such a case the fact of putting him to bed may make the patient confirmed in his fears that there is something seriously wrong with him, and, furthermore, the general atmosphere of hospital or bedroom at home is the worst possible milieu for him. His condition is frequently aggravated. He may lose weight during this period, and eventually the doctor is only too relieved to get him on his feet again. It is for this reason that I have always been against putting such a patient into hospital or nursing home 'for investigation'. All relevant investigations can be done with the patient ambulatory. During the course of extensive investigations some departure from the normal is bound to be found, for example hypertension, hypotension, anaemia, gynaecological abnormalities, or unimportant or irrelevant radiological or laboratory abnormalities, and may all lead to the wrong diagnosis and treatment.

Holidays

Peptic ulcer patients do well on holiday, even though the food may not be ideal, whereas the nervous dyspepsia patient usually does not do well on holiday. The latter should never be sent away on holiday until he is very much better. Farms and lonely places are not to be recommended. Let such a person go to a big city where there is much distraction and amusement and if possible congenial friends.

Occupation

The duodenal ulcer patient is nearly always a person who has a period of stress because he has undertaken more than he feels *confident* he can handle. Hence such a person should have his responsibilities reduced. Often that involves the advice of long abstention from work, taking frequent and regular holidays, an occasional weekend in bed, and no overtime allowed; and in very difficult cases it has often been my experience that I have had to advise the patient to change his occupation entirely.

The nervous dyspepsia patient, on the other hand, is much better off for the routine of work. Patients often remark that work 'takes their minds off their troubles'. Many patients search for an external cause for their symptoms and will often put the blame on overwork; but the clinician has to be cautious and should not agree lightly to their stopping work except in a few severe cases. While regular work is desirable, overstrain at work is to be avoided. These people with their conflicts have great difficulty in making even minor decisions, and if they are always pushed they cannot indulge in the luxury of deliberation which they need in the regulation of their personal lives, which, however, is not essential in repeating familiar patterns of routine work.

It is not much use considering the kind of occupation which is suitable, since we know that in practice we can rarely influence the life of the patient in that direction. However, it can be stated that the peptic ulcer patient is best when he is employed in doing something which is completely within his capacity, while the nervous dyspepsia patient is best when he is occupied at work in which he is most happy or when he earns his living by what is also his hobby.

The worries of a duodenal ulcer patient can usually be minimized by manipulating his external environment, whereas in the nervous dyspepsia patient the best results are obtained by reducing his anxiety by changes, if possible, in his internal attitude.

Allaying Anxiety

In the nervous dyspepsia patient anxiety and undue fears are usually present and may be prominent. To allay the basic anxiety involves doing nothing less than treating the patient in such a way as to overcome and resolve his conflicts, and that is seldom attainable except, presumably, by intensive, prolonged and very skilled psychotherapy. As my subject is the treatment of such a patient by the general practitioner or the physician, I do not intend to enter into that aspect of the question at all, since such special skill and opportunities are rarely available to us. It is, however, our business and our first duty to the patient to ensure that the functional symptoms of which he is complaining should not in themselves become a new focus for anxiety. It often happens that almost at the beginning of the interview the doctor gains the impression that he is dealing with a case of functional dyspepsia, but that should never be allowed to halt the further exploration of the case. The patient should be encouraged to tell his symptoms and to talk about his complaint and the things that pertain to his life. He is very much in need of 'talking himself out', and the doctor is the only person to whom such a patient can unburden himself. His story must be accepted with complete seriousness, and at no time should the doctor suggest by word or manner that he is incredulous. Quite apart, however, from the value of this interview to the patient, the relating of the patient's symptoms in great detail is of immense help in the subsequent approach to therapy and is also, of course, of scientific value in helping us to understand the psychosomatic and physiological mechanisms involved.

What applies to history-taking is also valid for the physical examination. The patient must be carefully examined. A routine examination of all the systems, including the heart, the blood pressure, and a urine examination must be done in every case. When it comes to special investigations, chiefly radiological, patients have to be treated differently. If facilities are available a routine gastro-intestinal, radiological investigation is of great value, not only in excluding organic disease, but also as a strong reassurance to the patient.

Having now armed himself with the knowledge of the patient's history and the results of the findings, the doctor can face the patient with confidence. He can explain to the patient that no organic disease is present, and it is desirable in most cases actually to enumerate the negative findings, since the patient's ideas about disease are often very vague. I usually tell my patients very emphatically and categorically that they have not got cancer or ulcer or gallstones or disease of the heart, or an abnormal blood pressure, or kidney trouble, and I very often also add that they are not in danger of going mad. The patient may be relieved, or he may say: 'Am I then imagining all these symptoms? Surely my pain cannot be imaginary?' It is not difficult, then, to explain to the patient

that the effects of a disturbed autonomic nervous system may manifest themselves in many ways upon the gastro-intestinal tract. The patient may follow us readily thus far, but if we stop at this stage no great relief is usually obtained. Relief is only obtained when a patient finds an amelioration of his symptoms as a result of our therapy.

Our next step must therefore be to prescribe treatment that will help the patient symptomatically. This is impossible as long as we have not learned to make ourselves better acquainted with the varied manifestations of functional disease. It requires close study and great application to the problems encountered in each individual case before we are competent to prescribe adequate treatment. There is a very common attitude abroad among doctors that once organic disease has been excluded the patient can be labelled 'neurotic' without an attempt being made to discover the exact nature and type of the disturbance. I should like to make a plea for the necessity for a closer study of the symptomatology of the various groups of cases which together constitute the functional nervous dyspepsias.

The relationship of the doctor to the patient is nowhere in medicine more important than in handling such patients. The more confidence the patient has in the doctor, and the more faith he has in his knowledge, ability, and sincerity, the greater the therapeutic results. The psychologists interpret the doctor-patient relationship, particularly in these highly suggestible patients, as a development of the child-parent relationship in which a transference of the patient's emotions to the doctor occurs to some degree.

With regard to the peptic ulcer patient there is no general underlying anxiety, and hence our approach in the handling and the treatment of the patient is not substantially different from that of any other disease.

Sedatives

Sedatives are employed both in peptic ulcer patients and in the nervous dyspepsia patients, but there is a difference in purpose. The peptic ulcer patient is intense and overactive, and for one reason or another he undertakes too much. It is necessary somehow to remove the burden of his activities from him. One of the most important weapons is the use of sedatives. The aim is to administer the sedatives in such amounts that his perceptiveness to outside stimuli is reduced. When an ulcer patient is put to bed he frequently cannot relax. The burden of his responsibilities continues to worry him, and the essence of the treatment is to ensure sufficient sedation until the patient becomes immune to worry. In the average case one has to give phenobarbitone, gr. 1½ - 2 a day, when the patient is put to bed, and in many cases this has to be increased to as much as gr. 5 or even more in 24 hours, the aim being mental relaxation. The patient becomes sleepy, heavy, and drowsy, and outside affairs cease to bother him. It is a sort of 'sandbagging' treatment.

In the case of a nervous dyspepsia patient, sedatives are also given, but it is rarely necessary to give more than small amounts, about gr. ¾ - 1 of phenobarbitone, a day. We cannot resolve the patient's conflicts by giving small doses of sedatives, and sedatives are not meant to act as hypnotics for pain or discomfort. The purpose of the administration of sedatives is to affect the irritability of the gastro-intestinal tract by their central action.

The psychoneurotic patient with gastro-intestinal symptoms is often restless and sleepless, but I have found it inadvisable to prescribe for such people soporifics for sleep. I prefer to give them a mixture which they take 3 times a day, which has a generally calming effect, does not make them drowsy, and ensures better sleep. The mixture which I have been in the habit of prescribing for the last 20 years and which I have found of great value is the following:

Sod. bic.	gr. 15
Pot. brom.	gr. 10
Phenobarbitone sod.	gr. ¼
Tinct. belladonna	min. 10
Syr. zing.	dr. 1
Aqua M.P.	ad. oz. ½

Other Medicines

Belladonna is given for both conditions — in peptic ulcer to inhibit the nervous phase of gastric secretion, and in nervous dyspepsia to relieve spasm in the gastro-intestinal tract. Some of the new tranquillizers have a relaxing effect and are useful in certain types of nervous patients.

I have not mentioned alkalis and anticholinergic drugs which are used in peptic ulcer patients. In the spastic-colon syndrome and other forms of functional dyspepsia we have so far no specific drug therapy.

Diet

In the treatment of peptic ulcer there are rational and scientific reasons for prescribing a certain diet — it should be bland, contain no chemical secretogogues, and also contain a fair amount of milk or other foods which neutralize the acid content of the stomach and by their fat content inhibit gastric secretion. In functional dyspepsia the question of restriction of diet will depend very much upon the phase of the illness. If there is a spastic colon present and symptoms such as pain, flatulence, constipation, and diarrhoea are prominent, then it is advisable to omit all roughage from the diet. In addition, I have found that fried foods and milk in more than small amounts are harmful. It is, however, important in the functional dyspepsias to ensure that the period of restriction of diet should not become overlong. These patients often blame any new symptoms on the food they have eaten recently, and they may eventually end up as food faddists and come to live on a very restricted diet.

The Phase of After-treatment

In the treatment of a peptic ulcer there is an initial phase of intensive treatment which may or may not involve bed rest. In the after-treatment, dietetic and medicinal instructions are given, but in addition the patient is given instructions which will help him in the healthier management of his life in the future. This relates chiefly to the avoidance of overstrain, taking regular holidays, ample rest, and sleep.

In the functional dyspepsia patient, in the initial period, attention is ostensibly devoted entirely to the amelioration of his gastro-intestinal symptoms. When rapport between patient and doctor has been established an attempt should be made by the doctor to influence the patient's life. The doctor should, if possible, ascertain what the patient's hobbies and real interests are and the patient should then be encouraged to indulge in them as much as is feasible. The great majority of people should be encouraged to carry on with their work, but this should be of a routine nature not involving personal decisions. It is not necessary, in fact it is inadvisable, to stress the element of rest. The patient may seize on this and become introspective about his bodily reactions to his activities. The patient should be encouraged to have social activities, whether in the form of amusement or sport, emphasizing chiefly those pursuits where he can make contacts and friends.

While bed rest is not encouraged it is of great value to the patient to learn the technique of progressive muscular relaxation as described by Dr. Edmund Jacobson in 1938. Frequent use of relaxation, once the patient has learnt the art, helps him to fall asleep and to relax at other times.

I should like to stress the importance of advising the patient about personal relationships. In these patients there is nearly always some unhappiness or maladjustment with the marriage partner, or with parents or children or others. It is often not possible to find an easy solution by trying to solve the personal troubles of our patients. In practice in our present social scheme we can rarely change a man's job or his wife or his mother. We can, however, give simple advice, being, as we are, detached and objective, and presumably wise.