THE MANAGEMENT OF COLITIS

By

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Introduction:

As the late Sir Arthur Hurst once said, no organ in the body is so slandered, so maltreated, so misunderstood as the colon. Almost daily, by subtle advertisement, the colon is accused, in the popular press, of crimes it never commits. Slogans, kept alive by imaginative cartoons, such as "inner cleanliness" rival "B.O." in the mind of the public, so that failure to achieve the former ranks as great a felony as inability to repress the latter. Thus is the colon slandered and as a result it becomes subjected to maltreatment, purged from above, irritated from below. No doubt the occasional purge, if it does no good, at least does little harm, but the chronic and habitual purge is one of the curses of modern civilisation, extremely common amongst women, and resulting in so gross an interference with natural function as to totally inhibit the natural reflexes, so that eventually these unfortunates are unable to evacuate without artificial aids. Equally shocking in its results is the regular enema, so popular and fashionable at one time in France that Voltaire, writing advice to a young friend, advised him that one of the assets he must look for in a wife was the ability to administer an enema pleasantly and rapidly. To-day we have what is called in America the "colon laundry," where the cult of colonic irrigation is carried to such lengths as to induce at each session such a discharge of mucus from the mucosa as to enable the attendants to assure the devotees that they suffer from a pathological inflammation of the colon. To this the label "mucous colitis" has been applied, and it must be emphasised at once that this term, rendered literally, is meaningless, since there is no evidence of inflammation in these cases. Most cases of "mucous colitis" are, in fact, cases in which the colon has been irritated, either by constant purging or by regular enemata, to such a degree that an excess of mucus is secreted as a protective mechanism against the mechanical trauma. Their cure lies in a prohibition of all such ill-treatment and by explanation and encouragement, a return to or relearning of that elaborate conditioned reflex which, by promoting mass peristalsis in the colon and subsequent filling

and distension of the rectum, ensures a regular evacuation. A further point in the proper understanding of the ways by which these people come to their unhappy pass is that, by neglecting the habits normally encouraged from early childhood, they gradually find themselves coming to rely more and more upon so-called bowel stimulants and at the same time attempting to achieve what they believe to be a normal daily stool. Not only is a daily stool not necessarily normal, or even ideal for a given individual, but the stool itself is one of the few things left in our world to-day which has not yet become standardised—neither as to size, shape, consistency nor colour.

Functional Defects:

Apart from these cases, there are others who exhibit the symptoms associated with the term "mucous colitis"—pain in the left lower quadrant of the abdomen, stools having a coating of slime, constipation (sometimes alternating with diarrhoea) and occasionally an alteration in the shape of the stool to a ribbon-like outline. In these, as in those where the colon has been subjected to repeated traumata, the immediate cause of the symptoms is colon spasm, a term far preferable to "mucous colitis," since it does not infer a particular pathology. As Ryle has emphasised, colon spasm is often part of a visceral neurosis, perhaps the part that is prominent because the patient is concerned over the symptoms and stresses them, but nevertheless only a part and calling for more than antispasmodics and sedatives—in fact, investigation is required into the cause of the underlying neurosis. In yet others, colon spasm is secondary to organic disease elsewhere in the abdomen, for example, chronic cholecystitis and recurrent appendicitis and the treatment is the eradication of the primary lesion. This third group is not a large one and is overshadowed in importance by the other two.

Diarrhoea:

Also coming into the differential diagnosis of colitis are those acute and chronic diarrhoeas in which there is no lesion of the colon and yet the

symptoms are liable to lead to a mistaken diagnosis. More common in infancy, but occurring in the adult, they include dietetic errors, parental infections, diseases of the small intestine and chronic renal disease. It is beyond the scope of this article to list these in detail. Finally, before considering true colitis, it is evident that other diseases of the colon such as diverticulitis, localised Crohn's disease and carcinoma, in which a bloody diarrhoea may be the outstanding symptom, will have to be differentiated, each according to their special features.

Ulcerative Colitis:

There remains one of the most puzzling and at the same time difficult and crippling diseases known to man. In ulcerative colitis we have a disease in which there is pathological and visual evidence of inflammation but whose aetiology remains obscure. Affecting chiefly adults in the prime of life, it can run a course of extraordinary diversity, ranging from an acute fulminating affliction, fatal in a few weeks, to an extremely protracted illness, lasting perhaps for many years and carrying with it many serious complications. It is often characterised, when chronic, by a tendency to spontaneous remissions, usually lasting for several months, sometimes even for years, only to be followed by a relapse, which may prove fatal or may again be followed by a remission. It is therefore a most difficult disease in which to give a prognosis; equally difficult is it to assess the effects of treatment and the inconsistency of its behaviour leads one to suspect that more than one disease or more than one aetiological factor operate under the guise of one name.

Aetiology:

At one time it was thought that all cases of ulcerative colitis were in reality cases of bacillary dysentery in which the organism had not been isolated. This is certainly not true of the acute case, for in acute bacillary dysentery the bacteriology provides no difficulty, nor is it true of acute amoebic dysentery, where the secret of diagnosis lies in the examination of the freshly passed stool, that is, in taking the microscope to the patient.

With the introduction of sulphonamide therapy the chronic case of bacillary dysentery has been reduced, at least in this country, to a rarity and although, in the investigation of ulcerative colitis, it is usual and proper always to exclude dysentery by appropriate investigation (blood examination, stool culture, sigmoidoscopy) it does not, in my experience, now present any problem in diagnosis.

The return to this country of many cases of chronic amoebic dysentery does however require this disease to be seriously considered at the present time in the differential diagnosis of ulcerative colitis. Should the typical undermined ulcers or pitted mucosa be seen at sigmoidoscopy, and yet examination of fresh stools be negative, the amoeba can frequently be found if swabs are taken at sigmoidoscopy, directly from the ulcerated surface. If still no proof is forthcoming, a therapeutic trial should be undertaken, since ulcerative colitis is totally unresponsive to emetine or any other of the compounds used to-day in the treatment of amoebic infestation.

Apart from dysentery bacilli, the other organism long held in America to be a specific agent causing ulcerative colitis was the diplococcus of Bargaen, and Bargaen's vaccine and serum at one time had a therapeutic vogue, not justified by the results.

The colon, like the stomach and duodenum, has strong nervous connections and it has long been known that certain emotional states, such as fear and anxiety can lead to a sufficient alteration in function as to produce diarrhoea. Those who have watched patients with ulcerative colitis over long periods know that relapses, as in the case of peptic ulcer, can not infrequently be related to domestic or financial crises. It would seem that emotion cannot be more than a part, albeit an important part, of the story: this aspect has recently been summarised in masterly fashion by Hardy in his Croonian lectures.

A study of the natural course of ulcerative colitis, with its tendency to spontaneous remissions and relapses as already mentioned, led me to consider whether, in some cases at least, the condition might not be the result of some deficiency. Preliminary investigations suggested that this deficiency might arise in or be produced by some portion of the small intestine. Subsequent feeding of ulcerative colitis patients with small intestinal mucosa or extracts therefrom has been associated with improvement or complete remission of symptoms in a number of cases and this at any rate suggests that the idea of a deficiency, rather than a primary infection, responsible for the inflammatory state of the colon, is worthy of further investigation and trial. It is always possible that the deficiency theory may be quite erroneous and that the good results obtained have been fortuitous, psychological in origin or due to a completely different mechanism—for example, a local effect in the bowel.

Treatment:

In any disease in which the aetiology is unknown and for which no specific cure exists, treatment

has to be symptomatic and largely based upon experience, whether one's own or that of others. The number of "cures" for ulcerative colitis is legion, but none have survived the test of time and to-day our aim is to aid the patient long enough to tide him over until such time as a natural remission sets in.

As in all disease, a main object is to achieve rest for the inflamed part and this is attempted medically by keeping the patient in bed until the active phase is over and by reducing the work of the colon—that is to say that a diet should be given which will contain as little undigested residue as possible by the time it reaches the large bowel. At the same time, since the patient has always lost much flesh, the diet should be of high caloric value, since, with intestinal hurry, there is inevitably insufficient time for and therefore poor absorption: supplementary vitamins should be added; the continued loss of blood leads to excessive iron loss which requires constant replacement; and finally constant diarrhoea leads to a state of chronic dehydration and the fluid intake should be high.

Thirdly, repeated small blood transfusions appear to produce a result beyond that to be expected from the mere replacement of lost blood.

There is no doubt that many cases are tided over their crises by these three measures—bed, diet, transfusion—and that nothing else is required. A small group respond dramatically to the administration of one of the sulphonamides of which in my experience sulphathiazole, succinyl sulphathiazole and sulphaguanidine give the best results and therefore one of these should not be withheld to any patient not responding satisfactorily to simple measures. A curious and unexplained feature of this response is that it becomes less marked with each successive relapse, so that finally sulphonamides become totally ineffective, and therefore suggesting that in a group of cases infection is initially important but that finally a progressive change sets in, producing permanent and irreversible lesions.

That the colon eventually becomes converted into a rigid functionless tube no one who has seen such specimens will deny and this change is recognisable by radiology. When this stage is reached there is probably only one course open, viz. to put

the large bowel out of commission by the performance of a terminal ileostomy and this operation is one of great value, being a life-saving measure in some cases, in others converting a bed-ridden invalid into a person once more able to take a useful and enjoyable place in society. It is however, important to remember that the operation, carried out as it is in debilitated subjects, is not without risks and furthermore, that, under the indications given, it is permanent. The latter feature, nevertheless, should not act as a great deterrent, since, with modern well-fitting streamlined receptacles, the idea of a permanent ileostomy is a great deal worse than the fact. Terminal ileostomy is sometimes advocated and performed for earlier cases than I have indicated, with the view of restoring bowel continuity after two or three years, but in my experience such a hope is often ill-founded and so long as there is a chance of the colon recovering its lost function, and with it a remission of symptoms, so long should operation be withheld.

Finally, for these cases not responding to a combination of sulphonamides, blood transfusion, rest and diet, and yet not severe enough to warrant ileostomy, or even as a last resort before ileostomy, there is a form of therapy already mentioned namely the administration of pigs' small intestinal mucosa. This need not be given by mouth in its raw form, but in a dessicated preparation, that is as a powdered extract, which can be taken with water or disguised in soup, marmite, honey, syrup or in any other way desired. Insufficient cases have as yet been collected for it to be possible to give figures for "cures," but the results are encouraging and no harm ensues if unsuccessful in a particular case.

Ulcerative colitis is such a dread disease and so variable in its prospects, that, while no new remedy is unworthy of trial, yet the assessment of results cannot be too careful.

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