PSYCHOLOGICAL ASPECTS OF GASTROINTESTINAL DISORDERS

George L. Engel

American Handbook of Psychiatry

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George L. Engel

e-Book 2015 International Psychotherapy Institute

From *American Handbook of Psychiatry: Volume 4* edited by Silvano Arieti, Morton F. Reiser

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consistency not only in the nature of the circumstances which are likely to be psychologically stressful or helpful, but also in the psychological characteristics of ulcerative colitis patients as a group. For the most part, these characteristics antedate the development of the active disease, though they may, in certain respects, also become exaggerated in the presence of the symptomatic bowel disorder. To what extent the as yet unidentified biological preconditions for the bowel disease contribute distinctively to the psychological development of the patients can, at present, only be conjectured.

Summary of Psychological Data. In 1955 we summarized the available knowledge about the psychological features of ulcerative colitis patients beginning with the first study by Murray in 1930.41 Since then numerous clinical reports have largely confirmed those formulations; so too has psychological testing using projective techniques. On the other hand, studies comparing ulcerative colitis patients with "controls" (usually other gastroenterology or general medical patients) using MMPI (Minnesota Multiphase Personality Inventory), or various ratings of psychological abnormality have failed to reveal differences; indeed, one group using such an approach pronounced colitis patients to be "supernormal"! For the most part such studies can be criticized on the basis of a naive conceptualization, that ulcerative colitis is a "psychogenic disease" caused by psychic disturbances, and therefore should demonstrate more rampant psychopathology than the

control patients. Furthermore, the psychological procedures used have not been sufficiently specific to detect the personality features reported by clinicians to characterize ulcerative colitis patients. These characteristics, as described below, may differ in degree from patient to patient but still provide a reliable overview of what to expect upon the psychological study of such patients. Among the more important variables accounting for differences between patients are the sex and age at which the colitis began.

Personality Structure. A high proportion of ulcerative colitis patients are described as manifesting so-called obsessive-compulsive character traits, including neatness, orderliness, punctuality, conscientiousness, indecision, obstinacy, and conformity. A few are conspicuously messy and dirty. Along with these are often noted a guarding of affectivity, overintellectualization, rigid attitudes toward morality and standards of behavior, meticulousness of speech, avoidance of "dirty" language, defective sense of humor, obsessive worrying, and timidity. Some are petulant, querulous, demanding, and provocative, but by and large well-directed aggressive action and clear-cut expressions of anger are uncommon. Many investigators have been impressed with the extreme sensitivity of these patients, their almost uncanny perception of hostile or rejecting attitudes in others. They are easily hurt, constantly alert to the attitudes and behavior of others toward them, and they tend to brood and withdraw. Much activity is devoted to warding off or avoiding rebuffs, manifest in some patients by placating attitudes,

submission, politeness, attempts to please and conform, in other patients by attempts to deny or ignore by remaining proud, nonchalant, haughty, and aloof.

Some patients give an outward appearance of energy, ambition, and efficiency, but this often proves to cover feelings of inferiority, an acute sense of obligation, a need to experience some sense of security. By and large they avoid chances and do not deal daringly with their environment. Such people are often admired for their virtue, morality, and high standards. They are more likely to seek achievements in the intellectual sphere and to eschew modes of life demanding vigorous physical activity. It must be emphasized that such characteristics are entirely compatible with effective accomplishment, and indeed some noted scientists, artists, writers and even a few athletes have been numbered among ulcerative colitis victims. While good statistical data are not available, it is a clinical impression that the disorder is relatively less common in the lower socioeconomic bracket and in the intellectually less well endowed.

Relationship with People. The patient with ulcerative colitis reveals a rather consistent pattern of interpersonal relationship, a pattern which originates in the relationship with the mother (see below). On the one hand, he appears to have a quite “dependent” relationship with one or two key persons, usually a parent or parent figure; on the other hand, he has a limited

capacity to establish warm, genuine friendships with others.

Close scrutiny reveals that the patient often lives through a key figure who at the same time lives through him. Often this is the mother or a mother substitute. The patient appears to use the key figure as though a part of his equipment for dealing with the external world. He leans on the key figure for guidance, advice, and direction; he is reluctant to take initiative or to plan independent action, and he tends to act out the wishes, conscious and unconscious, of the key figure. At the same time this is a highly ambivalent relationship, one within which overt expressions of hostility are fraught with great danger, for to be rejected may induce overwhelming feelings of helplessness. This type of relating reflects a fixation at a symbiotic level of object relationship and is a recurring feature in the majority of patients. The quality of expectation from the key figure (mother) is magical, imperious, and omnipotent. In most cases it is clear that it is not only the patient but the maternal figure who needs the mutual symbiosis.

This pattern of relating may be carried over into the relationship with the physician. Ordinarily, the patient either becomes very “dependent” upon his physician or establishes no relationship or, at best, a very superficial one. Further, the patients who do develop a “dependent” relationship in general fare better than those who do not. Once established, it is difficult for the patient to relinquish the relationship and remain in good health. A disruption

of the doctor-patient contact is not infrequently followed by some relapse of symptoms.

Mothers: Psychological Characteristics and the Symbiotic Relationship. The nature of the relationship with the mother is of decisive importance in understanding the psychology of the ulcerative colitis patient. There is also an impressive consistency in the description of the mothers of patients with ulcerative colitis, although women patients describe their mothers differently from the way men do. This consistency is confirmed by direct observation of the mothers and by projective testing of the children. In general, the mothers are described as controlling and dominating. Women patients are likely to see their mothers as powerful and overwhelming figures, who make them feel helpless and dependent. They often describe their mothers as cold, unaffectionate, punitive, rigid, strict, and judgmental. The men, although describing similar domination, are more likely to find this acceptable and to portray their mothers as kind, considerate women who worry constantly about their well-being.

Women more often portray themselves as in competition or combat with the mother, while the men more readily capitulate and give in. Despite these different attitudes of the men and women toward their mothers, one readily finds many similarities among the mothers. In general they are either unhappy, pleasureless, gloomy women with no great zest or enjoyment in life,

or hard-driving, businesslike, perfectionistic women who are active and concerned with many outside interests but often dissatisfied with their own or others' accomplishments. They tend to be worrisome, complaining, pessimistic, and often hypochondriacal. Expression of genuine warmth, affection, and understanding comes with difficulty. A high proportion show moderate to severe obsessive-compulsive traits; a smaller proportion show pathologically disordered behavior or eccentric preoccupation with collections of odds and ends. A few are psychotic characters or frankly psychotic, usually paranoid. Many of these mothers are described as depressive.

A prominent feature is the mother's propensity to assume the role of a martyr, often mobilizing thereby guilty reactions from the patient.

The persisting symbiotic nature of the patient's relationship with the mother is reflected in the patient's exquisite sensitivity to the mother's feelings and behavior. The patient often behaves as if he cannot distinguish his own feelings from his mother's. Patients comment on their sensitivity to mother's sigh, disapproving look, or change in posture or facial expression, as well as to verbal expressions of distress. Some patients, especially the men, submit passively and obediently to the mother's domination. Others, while submitting, do so with the complaint that mother won't permit them to do otherwise or that they can't stand mother being upset. In general, the patient

feels under great pressure from the mother to perform, whether it be in the sense of general social achievement or in ways peculiarly designed to meet the mother's emotional needs or alleviate her guilt, shame, or anxiety. This may lead the patient to manipulate others so that mother will be spared distress. In other words, the patient "learns" the conditions under which he will be spared rejection. Mother's love is conditional on his fulfilling her requirements. In the mutual symbiosis the patient may unconsciously act on the underlying wishes or needs of the mother, even to the extent of remaining ill.

Notable is the need of these mothers to be in control of their children even after they are grown up. Many insist on taking care of their ill adult sons or daughters even when spouses are willing and available.

Fathers. In general, the woman patient is inclined to portray her father as a gentle, kind, passive, usually ineffective man to whom she is quite attached, while the male patient is likely to describe his father either as brutal, punitive, threatening, coarse, and very masculine, or occasionally as passive and weak, and unable to stand up to the mother. The man may see his father as threatening and abusive to the mother, in which case he becomes excessively submissive to both parents. Not uncommonly the male patient feels that his father compared him unfavorably to a more masculine brother who more adequately fulfilled the father's ideal. The woman, on the other

hand, often complains that the father did not adequately protect her from mother's aggression, that he let her down.

We have seen two men patients whose symbiotic object relationship was with the father and not the mother. In both cases the son was attempting to fulfill the ambition for physical accomplishment of a father who was frustrated by crippling in adolescence. Superficially these two patients presented as very active, even adventurous men. In both the disease began when they disappointed the father by failing in an important competitive sport event.

Family Dynamics. A study of families with children with ulcerative colitis has characterized these families as "restricted." They reveal a marked inability to engage in or even recognize opportunities for behavior outside the pattern of their own immediate lives. They are limited in the range of interaction, careful in dealing with each other, and they handle a variety of situations in a similar fashion. This was seen as a false solidarity or pseudomutuality. More family studies are needed.

Sexual and Marital Adjustment. In general, these patients tend toward inadequate sexual development. Interest and participation in sexual activity tend to be relatively low. Most of the women are frigid, and even those who experience orgasm do so infrequently. A few patients engage in little or no

heterosexual activity even when married. Many acknowledge a preference to being fondled or cuddled, more like a child, and largely reject any genital approach. They are prone to regard sexual activity in anal terms, using such terms as “dirty,” “soiling,” “disgusting,” “unclean,” etc., and are squeamish about body contact, secretions, and odors. Excessive bathing, use of deodorants, concern about being malodorous or dirty may be present even in the absence of bowel symptoms, and may be used as rationalization to avoid sexual contact. In the marital relationship the spouse commonly fulfills the role of the succoring, sustaining mother or takes a role subordinate to the mother. Sometimes it is a mother-in-law, who closely resembles the mother, who is the real object for the patient. Under such circumstances the spouse often is related to more like a sibling than a marital partner.

The Nature of the Significant Psychological Stress. In establishing exactly the time of onset of the disease, it is necessary to establish the first clear deviations from usual bowel activity. Many patients are found to have had rectal bleeding or abrupt severe constipation for days, weeks, or even months before diarrhea begins. When the onset of disease is accurately established, it is often found that the time interval between a psychologically stressful circumstance and the onset of the first symptom of the colitis is a matter of hours or a day or two. On the other hand, there are cases where the onset is rather gradual and not easily timed. Here one deals not with a well-defined stressful experience but rather with a gradually changing psychic

status during which symptoms gradually and sometimes intermittently develop. The latter is typical of colitis developing during adolescence. In general, psychologically stressful events are likely to fall into the following categories: (1) real, fantasied, or threatened interruption of a key relationship; (2) demands for performance which the patient feels incapable of fulfilling, especially when support had already been withdrawn or when disapproved activities are involved; and (3) overwhelming threat from or disapproval by a parental figure. As a rule hostility and rage toward the disappointing figure is repressed. Common to all these circumstances is an acute or gradually developing feeling on the part of the patient that he has become helpless to cope with what is happening. The disease becomes active in the course of "giving up" psychologically, which is marked by the affect of helplessness. Patients verbalize giving up in such terms as "too much," "despair," "nothing left I could do," "helpless," "overwhelmed," etc.

The following vignettes illustrate patterns of onset and typical precipitating, psychological stress.

Case 1. Constipation and Bleeding. A thirty-one-year-old married woman became pregnant a few months after the birth of her first baby. The first pregnancy had been a deliberate and successful attempt to hold her husband, who had become interested in another woman. To have two babies so close together, however, seemed more than she could cope with. Shortly after she

missed her first period she became constipated and noted the passage of bright red blood. For the next six months she continued to pass fresh blood, with and without feces, one to three times a day. Stools remained formed and somewhat constipated, often with fresh blood on the surface. True diarrhea developed six months after the bleeding began, as the inevitability of the second baby became undeniable and the implications overwhelming.

Case 2. Acute Constipation. A twenty-one-year-old married woman was awaiting the return from overseas of her soldier husband, whose train reached the city that day. After keeping her waiting four to five hours while he visited his mother, he appeared at the door, and without further elaboration announced that he wished a divorce. On this note he left. The same day she was seized with terrific cramplike pain in the left lower quadrant of the abdomen and an urge to defecate, but she was unable to do so. She was admitted to a hospital where she was given eight enemas in two days before any relief was achieved. Following this she had formed stools, three to four times a day, for a month, when small amounts of blood were first noted. Thereafter she passed blood and mucus four to five times a day, stools became semiformed, then grossly diarrheal and bloody.

Case 3. *Bloody Diarrhea.* A twenty-nine-year-old woman married when she discovered she was two months pregnant. She hoped to hide the premarital conception from her puritanical mother by saying the baby was

born prematurely. Gestation actually was seven months, so the baby was born five months after the marriage. Two days after the baby was brought home and her mother arrived to help, she had abrupt onset of chills, fever, and diarrhea which became grossly bloody in a few days.

Case 4. Insidious Diarrhea. A fifteen-year-old girl noted over a period of two months a gradual increase in the frequency of her bowel movements, which remained, however, formed but soft. This coincided with the first emergence of the typical conflicts of adolescence. She was then in an automobile accident, which involved no serious injury but did bring up some problems of adolescent acting out. Immediately after the accident her bowel movements became watery and frankly bloody.

Case 5. *Tenesmus and Cramps.* Immediately following the death of her brother, a thirty-one-year-old unmarried woman developed postprandial distention, belching, mild lower abdominal cramps, and tenesmus associated with the passage of small amounts of blood, mucus, and flatus. Her stool remained formed and hard, and she was constipated for a month. Thereafter she had one to three semisolid fecal movements with blood.

In general, the older the patient at the time of onset of the disease the more likely is the precipitating circumstance to be a major external event. Thus, a fifty-year-old chairman of a university department experienced his

first attack, which was fatal, soon after the death of both his parents in a fire. His wife, who would have been his source of support, lost her mother around the same time.

At the present time there is no information as to why this psychobiological state of giving up and helplessness is associated with activation of the ulcerative colitis process. Of interest is the fact that if the patient becomes angry and aggressive, and does not give up, but instead feels guilty, he is more prone to develop headache than activation of colitis. Indeed, the appearance of headaches in a heretofore acutely ill colitis patient is a good prognostic sign.

Three incidents from Case 1 (above) illustrate this:

October 31, 1947—headache: The patient had been free of bowel symptoms for three months. Her two-and-a-half-year-old son defecated in his crib and smeared the feces. "I was awfully mad and gave him a spanking. That night I had a migraine attack. The next morning I still had a headache. Then I realized how guilty I was feeling for spanking him. Shortly thereafter my headache disappeared."

August 20, 1934—-bleeding: The patient and her husband bought a building lot, but it turned out that the real estate man tricked them. The patient became very angry with him and told him how she felt. He was

unmoved. “I got so mad, and there was absolutely nothing I could do about it.” Now they faced the loss of their precarious financial reserves. By that evening she was bleeding.

March 28, 1951-—headache terminating attack of colitis: The patient began to bleed on February 20, 1951, when she realized a business venture of her husband was going to fail. She had increasing bleeding and diarrhea and after a couple of weeks it became necessary to confine her to bed at home. At my suggestion another doctor saw her at home, but she had the feeling, “you are leaving me flat.” I called her by phone daily, but she was apathetic and relatively uncommunicative. The other internist and I considered hospitalization but decided to delay it as long as possible to keep the financial burden at a minimum. On March 28, 1951, she called me for the first time and said firmly and belligerently, “You must put me in the hospital; I am too sick.” On admission I was astonished to discover that she was not suffering primarily from diarrhea but from a severe, left-sided migraine headache, with nausea and vomiting. Her opening remark was an unprecedented: “I don’t like you.” Her headache subsided by noon and within two days she had formed stools without blood.

In general patients who are good at differentiating their feelings have little difficulty in identifying the affective state most conducive to relapse. Thus one woman claimed the anxiety associated with long-standing phobic

symptoms never precipitated colitis symptoms; nor did bursts of rage expressed to her estranged husband. The dangerous period was when she ceased trying to cope actively with these stresses and gave up, sometimes taking to her bed to "sleep it off" only to awaken with cramps or bleeding.

Implications for Treatment. The physician who understands the basic psychological processes operating in these patients is much better equipped to do what is helpful and to avoid doing what is harmful.

The first step in the treatment of an acutely ill patient is to establish a relationship. This is best achieved through the sensitive quality of the physician's first inquiry and his prompt attention to relief of discomfort. Thereafter, constant awareness of the patient's needs and of his characteristic ways of functioning is of the utmost importance in enabling the patient to utilize the relationship with his physician as a means of reestablishing his psychological equilibrium and health. In many respects, this is the keystone of the whole treatment program, and if the initial step is unsuccessful, the whole treatment program may fail.

The physician who undertakes the care of the patient with ulcerative colitis assumes a very complex responsibility, for if he succeeds in this first step of establishing a relationship with the patient, he must be aware that in so doing he is, in part at least, taking over the role of the key figure. This

means that while this relationship may be a powerful factor in initiating recovery, its disruption may carry with it the equally great danger of precipitating a relapse. The patient, for some time at least, remains just as vulnerable to a disturbance in his relationship with his physician as he was to a disturbance in his original key relationship. He quickly comes to endow his physician with omniscient and omnipotent qualities. He literally expects the physician to know more of his needs and wants than he himself reveals. Therefore, the doctor must attend closely and respond appropriately to the patient's communications of needs and of sources of discomfort, even when these are not verbally conveyed. This demands patience, a willingness to devote time to the patient, and, most important, the capacity to appreciate and accept the patient's need to have tangible demonstration of the physician's reliability, even in respect to such seemingly minor details as punctuality, following through on promises, and availability for help. Simply the assurance that the physician can be reached at any time can be a powerful source of help, even if this resource is never actually used. It is difficult to overemphasize the importance of these small details, which are perceived by the patient as indices of the doctor's successful and effective participation in his care.

A patient (Case 1, above) had a serious relapse when she had called her physician to check on her medication schedule only to discover that he was out of town and unavailable for a week. When she became my patient we had

a standing arrangement whereby she could call me anytime day or night, even when I was away from the city. She called infrequently and then only to report some considerable symptom or a disturbing situation. A relapse occurred following a remission of almost a year when the patient moved into a house in a new suburban tract only to discover that the phone company had not yet laid the cables and hence she would be without a phone for an uncertain period. Symptoms promptly subsided when I was able to prevail upon the phone company to put in an emergency line and she once again knew she could reach me.

The management of the family is another important consideration. Awareness of the kind of relationship that exists with other members of the family, especially with the mother or the spouse, prepares the physician for the kinds of difficulties which may arise. Usually the important other figure is experiencing a considerable amount of guilt concerning the illness of the patient and may have a strong need to reassert her control both over herself and the patient. It is important that the physician not take a retaliative or a punitive attitude toward the other members of the family. On the other hand, to the patient he must appear stronger than any member of the family. Occasionally, for example, we find the patient making demands, such as to leave the hospital or change medication, which, in fact, reflect not the patient's needs or concerns but rather those of some other family figure. For the physician not to accede to such requests may be a great relief to the

patient, for by asserting his medical authority the physician protects the patient from what actually may have been a frightening prospect.

While this approach is predicated on a psychotherapeutically oriented perspective, it is well to recognize that some patients can profit from more systematic psychotherapy in the hands of a skilled therapist. The capacity of a patient to so benefit must be evaluated by the psychiatrist, but care must be exercised that the referral to a psychiatrist, even when initiated by the patient, is not interpreted by the patient as a rejection by the internist or gastroenterologist. The latter, by all means, should maintain an active involvement with the patient so that beginning psychotherapy is seen as an addition, not a replacement.

In one study, in which patients receiving psychotherapy in addition to medical therapy were matched with patients receiving medical therapy alone, pretreatment criteria favoring good response to psychotherapy were identified. These included: (1) the presence of an obvious precipitating event, especially if recognized by the patient; (2) depression traceable to loss, as compared to depressive apathy; (3) the unconscious use of diarrhea and bleeding as substitutes for rage and as means of punishment, in contrast to regarding the illness without shame or guilt as a justification to remain helpless and make demands on others; and (4) a wish to become independent.

In recognizing the role of psychotherapy in the treatment of these patients, one should also have very clearly in mind what psychotherapy can and what it cannot be expected to accomplish. There is no evidence at the present time that psychotherapy, no matter how intensive, can eliminate the biological defect underlying colitis. Therefore, an expectation of complete cure is unjustified. While remission and complete healing are common, psychotherapy cannot ensure against recurrence in the face of sufficient stress. The major contribution that psychotherapy can make is the modification of the basic psychological structure so as to render the individual less vulnerable to the types of situations in which the disease becomes manifest. These particularly concern the capacity of the patient to develop human relationships and to tolerate their loss or the threat of their loss. Successful psychotherapy usually brings about a significant improvement in the patient's techniques of dealing with the early parental figures, as well as some resolution of early conflicts. With this one generally sees a gradual emancipation from parental figures and an increasing capacity to establish satisfying and enduring relationships with others. But, as with any person, there may still occur events with which the patient feels he has no effective means of coping and under such circumstances the disease may resume. In general, however, we find that the patient who has achieved some successful psychotherapeutic response has more chance of maintaining a remission. But it is of the utmost importance that the patient, embarking on

psychotherapy, clearly understands that psychotherapy cannot eliminate the potential for colitis, otherwise even a mild relapse may be felt as a personal failure or destroy the patient's confidence in the therapist, thereby constituting a major stress capable of provoking a massive recurrence. Many of the serious relapses during or upon termination of psychotherapy or psychoanalysis have been of this nature and have led to an unjustified pessimism as to the effectiveness of this approach.

As to modalities of psychotherapy, insight therapy is more useful with the relatively more active, independent patients, while patients who are strongly symbiotic or transitional are helped more by support, catharsis and suggestions than interpretation. Best results are obtained by therapists who rate high in interest in the patient, empathic understanding, and optimism about results, and with patients who are most hopeful about being helped and who can develop a warm trusting working alliance with the therapist. The ability of the therapist to "fit" or match himself to the fluctuating dependency needs of the patient is important. Symbiotic patients improve when their therapists are able to tolerate their infantile dependent needs without rejection, impatience, or arbitrary corrective attitudes. The papers by Karush et al., and by Groen et al. are excellent sources of information about the psychotherapy of ulcerative colitis patients.

In considering the usual indications for ileostomy and colectomy,

namely, intractable diarrhea, recurring fistulae or abscesses, massive hemorrhage, rectal incontinence, and threat of cancer, it is important to appreciate how stressful it is for these patients not to have complete control over their bowel activity, whether it be in the form of unpredictable bleeding, diarrhea, or cramps. With his great need to maintain control over his thoughts, acts, and body, and to perform well, incapacity on this score is often felt as a true inadequacy, for which the patient often inappropriately assumes responsibility. Hence the removal of the offending colon and the construction of an artificial anus (ileostomy) over which the patient generally has much better control often has a more salutary effect psychologically than had been anticipated by the patient, his family or physician, all of whom tend to view the procedure primarily in terms of its mutilating effect. Hence the psychotherapist is well advised to keep in mind not only these indications for surgery, but also the contribution he can make in preparing the patient for operation and the postoperative adjustment. Above all must he appreciate that recourse to surgery does not constitute a failure of psychotherapy or grounds for relinquishing his therapeutic role. There is great advantage for the prospective ileostomy patient to meet a successful ileostomy patient and to learn at first hand the gains as well as the realistic problems of ileostomy. Additional help may be provided through participation in the activities of the Ileostomy Clubs, which constitute a resource not only for practical information but also for group activity which is psychologically sound for

these patients. Their slogan HELP (Help, Encouragement, Learning, Participation) clearly reflects an intuitive grasp of the basic human and psychological needs of the ulcerative colitis patients.

Ulcerative Enteritis. That the same pathological process may also involve the terminal ileum has been known for a long time. Less well known is that it may develop in a previously healthy ileum after colectomy and ileostomy have been performed, and under the same types of psychologically stressful situations as had previously led to the activation of the ulcerative colitis. The entire small bowel may rarely be so involved. Swelling of the stoma with partial obstruction, profuse watery drainage, or perforation may ensue. Edema, petechial hemorrhages, and ulceration of the protruded mucous membrane may be noted.

The risk of this complication provides further reason why a continuing supportive or psychotherapeutic approach is called for, even after colectomy and ileostomy, especially with the patient who has been in psychotherapy.

Regional Enteritis and Colitis (Crohn's Disease)

While not the subject of as extensive psychological inquiry as ulcerative colitis, the available data indicate many similarities between patients with regional enteritis and those with ulcerative colitis. This is not surprising,

considering the fact that although clearly differentiated on pathological grounds, there is nonetheless a tendency for the two diseases to occur in the same family suggesting a common genetic factor. Furthermore, now that it is being appreciated that a similar pathological process may affect the large bowel (granulomatous colitis, Crohn's disease of the colon), it is clear that at least some of the colitis patients studied psychologically in the past actually belonged in this category. The several patients that this writer has studied who later proved to have the granulomatous form of colitis did not appear to differ psychologically from those who had classical ulcerative colitis. The resemblance is greatest in respect to the prominence of obsessive-compulsiveness, the patterns of relating, and the vulnerability to object loss and subsequent development of giving up as the setting in which onset or relapse of active disease occurs. Compared to ulcerative colitis patients, some authors feel patients with Crohn's disease are relatively more flexible and more active, but the only systematic comparative study suggests no differences. Hence, until more information is available, it seems warranted to use the data on ulcerative colitis as a rough guide for the management of these patients as well. More detailed study is called for.

Possible Somatopsychic-Psychosomatic Conditions

There are a number of other conditions which possibly can be classified under the heading of somatopsychic-psychosomatic disorders but which have

not yet been sufficiently studied to justify the claim.

Celiac Sprue

It is currently believed that celiac disease of childhood and many instances of so-called idiopathic steatorrhea of adulthood represent the same disorder, hence the term "celiac sprue." In both diseases identical and to a large extent reversible damage to the small intestinal mucosa is produced by low-molecular-weight glutamine-rich polypeptides, isolated from the breakdown products of gluten, the water-insoluble protein moiety of wheat. Many adult patients give a history of celiac disorder early in childhood, while proven childhood celiacs, allegedly recovered, may as adults still show absorption defects, typical histopathological changes, and reactivity to gluten, with intermittent mild symptoms of malabsorption. Evidence for a genetic determinant has been brought forth, leading to the suggestion of an inborn deficiency in the intestinal mucosa of a peptidase that hydrolyzes the peptides of gluten.

The natural history of spontaneous remissions despite the presence of dietary gluten in the childhood form of the disease, and the poor correlation between symptoms and the presence of typical histopathological changes suggests that the underlying mucosal defect and the presence of gluten in the diet may be necessary but not sufficient for the development of the

malabsorption syndrome. Individuals appear to differ in sensitivity to gluten, and symptoms may also correlate more with the extent of the intestine involved than with the severity of the lesion on biopsy. The effects of gluten are more marked on proximal than on distal intestine, presumably a reflection of declining concentration of the noxious polypeptides. The great majority of patients show prompt marked clinical improvement on strict glutenfree diets with reversal of epithelial changes more complete distally than proximally. But returning gluten to the diet does not necessarily reactivate symptoms even though biopsy evidence of damage may be demonstrated. Hence some have suggested that psychological stress may be a contributing factor. Among children a disturbance in the mother-child relationship, including changes in patterns of handling and feeding, appear to be associated with exacerbations, while remissions have been brought about through improving the mother-child relationship, even without removing gluten from the diet. Among adults, with and without a childhood history, onset or recurrences are noted in settings in which real or threatened loss of support eventuates in psychological “giving up” with feelings of sadness, despair, and helplessness. These are psychological states in which Sadler and Orton have demonstrated decreased absorption of amino acids in a surgically isolated loop of ileum in a man who did not have celiac-sprue syndrome.

Suggestive data on this interrelationship between the intrinsic intestinal defect, dietary gluten, and psychological factors have been provided by

Grant's double-blind study of eight patients with adult celiac disease, four of whom were known to have had childhood celiac disease and three of whom had a history compatible with childhood celiac disease. Placed on a gluten-free diet, all patients showed remission of symptoms and improvement in absorption. Then, in a double-blind fashion they were given capsules containing either gliadin (a derivative of gluten containing the glutamine-rich polypeptides) or an inactive material. The occurrence of symptoms was noted and the psychological state evaluated. Gliadin capsules were administered a total of thirty-one periods during five of which typical malabsorption symptoms developed. All of these occurred within days of the onset of a psychological upset, generally characterized by some loss, defeat, discouragement, or helplessness. On *no* occasion did gliadin alone induce symptoms in a patient who otherwise was emotionally composed. On the other hand, bowel symptoms also occurred during periods when the patient was similarly upset but was *not* receiving gliadin. Notable, however, was the fact that under such conditions the symptoms were those of a nonspecific, nonfoul watery diarrhea, sometimes with mucus, and did not include the typical bloating or the foul smelling, pale, copious stools typical of malabsorption. These observations suggest an interaction between at least three factors in the production of the full-blown malabsorption syndrome: (1) an intrinsic intestinal defect; (2) gliadin in the diet; and (3) some effect mediated through psychophysiological or neurogenic influences.

The data available are insufficient to justify any statement concerning distinctive psychological characteristics of this group of patients. Paulley emphasizes querulousness and extreme rigidity among the more disturbed patients and perhaps a higher incidence of psychotic, often delusional and paranoid features. We have been impressed with the immaturity and dependency of the adults with a childhood history of celiac disorder as well as their unusual vulnerability to loss of love objects. Prugh, in his study of children, emphasizes the prominence of obsessive-compulsive traits, and the controlling and ambivalent nature of the mother's relation with her child, and points to evidence that such attitudes of the mother antedated the birth of the child. He describes the children on the surface to be passive, often withdrawn, inhibited personalities, with a tendency toward obsessive-compulsive features. Overt expressions of aggression or self-assertion seem to be difficult for these children. As infants, they were fussy, irritable, and cried a great deal, even before the onset of the celiac symptoms. Somatic effects of multiple nutritional deficiencies as well as of the psychological responses to diarrhea and other debilities must not be underestimated in evaluating some of these descriptions.

Irritable Bowel Syndrome

This is the classical "functional" bowel disorder, characterized by alternating diarrhea and constipation, abdominal cramps, flatulence, and at

times increased mucus in the stools. Some investigators differentiate two groups, i.e., spastic colon and functional diarrhea. Those with spastic colon have lower abdominal pain and cramps as their main symptom, and in addition have constipation which alternates with diarrhea or with periods of normal bowel movements. Patients with functional diarrhea have little or no abdominal pain, their chief symptom being constant or intermittent diarrhea. Many are overtly anxious and their symptoms may more properly be classified as instances of diarrhea as a physiological concomitant of affect, though it remains obscure why some anxious people have diarrhea and others do not. Both neural and hormonal mechanisms have been postulated. Accelerated transport of intestinal contents, through increased peristalsis induced by increased sensitivity to cholecystikinin, by gastro-ileal or gastro-colic reflexes or by higher neurogenic effects may induce diarrhea simply by overloading the absorptive capacity of the colon. Both with spastic colon and with functional diarrhea it has been claimed that the colon reacts excessively to parasympathetic stimulation as compared to the colon of patients without bowel disorder or with ulcerative colitis, but some writers disagree. They point out that the increase in intraluminal pressure is a function of the mechanics of intraabdominal pressure recording, important factors being resistance to expulsion and the consistency of the stools. While pressures are low with diarrhea and high with constipation, the increased activity in painless diarrhea may reflect a control mechanism for handling excessive

intestinal contents by segmentation rather than by inhibition. Such findings give further reason to regard patients with painless diarrhea as belonging to a different group from the rest of those with irritable colon syndrome.

Be that as it may, there is virtually universal acceptance of the view that bowel symptoms in both types are somehow brought about by psychological influences. This has led to the classification of irritable colon syndrome as a "psychogenic" or "psychophysiological" disorder, the inference being that the bowel disorder can be accounted for by chronic and excessive parasympathetic stimulation psychophysiologically determined. This is almost certainly an oversimplification. The virtually lifelong symptomatic history of many of these patients suggests that there may be as yet unidentified organic factors influencing the bowel response to psychological stress. Until more definitive data are available, it seems prudent not to exclude such primary organic determinants; hence its classification here as a "somatopsychic-psychosomatic" rather than psychophysiological disorder.

Because there is no clear organic criterion for the diagnosis of irritable bowel syndrome, which even gastroenterologists make largely by exclusion, existing data on the psychological characteristics of patients with this syndrome are highly dependent upon the population utilized. In general they have been patients referred to a psychiatrist after the gastroenterologist has ruled out other explanations of the symptoms, and often because he has been

impressed by evidence of neurotic difficulties. Early published series may well have included patients who now would be recognized as suffering from lactase deficiency or adult celiac syndrome. Hence it is likely that patients so far reported on have been selected to begin with because of manifest emotional problems, and are neither a representative population nor even necessarily all have irritable bowel syndrome. With this caveat it is claimed that patients with spastic colon are more inclined to be rigid, obsessional, and compulsive individuals while those with functional diarrhea may show more diffuse free-floating or phobic anxiety as well. Many tend to be orderly, methodical, conscientious, precise, preoccupied with cleanliness, tidiness, regularity, punctuality, and schedules, and it is not surprising that some gravitate to work roles in which such qualities are valued as accounting, bookkeeping, filing, library work, etc. Such patients place a high premium on intellectual control and performance and are very restrained in expression of emotions, be they pleasurable or unpleasurable. By the same token, they tend, on the one hand, to maintain a cold, intellectual almost impervious air toward the emotional turmoil of others, while, on the other, to be extremely sensitive to hostile or rejecting behavior, or emotional outbursts when directed toward them. In the latter respect they appear as hypersensitive and easily hurt to the point at times of paranoid suspiciousness. Important in the underlying psychodynamics are conflicts about giving and receiving, and the control of aggression. Distrustful and fearful of rejection, especially if aggressive or

sexual impulses are displayed, they tend to hold on to what they possess, not to give. Some are stingy, stubborn, and parsimonious, while others overdo the guise of generosity (reaction formation) but as a result constantly feel unappreciated and disappointed that the recipient is not more grateful. Feelings of depression are common, and there is a relatively high incidence of significant clinical depression.

It has been suggested that the alternations between constipation and diarrhea characteristic of these patients reflect shifts between psychologically holding back and maintaining control, on the one hand, and letting go in an unconscious, aggressively soiling or depreciatingly giving way on the other. It is of interest that headaches commonly accompany the controlled, constipated phase, which is marked not only by guilt-determined inhibition of action but also by the use of the head (intellect). In general, diarrhea is most prominent at times when emotional tension is most evident.

Achalasia (Cardiospasm)

Though not accepted by all, the association between psychological stress and onset or exacerbation of cardiospasm has been proposed for many years. However, the disorder is relatively uncommon and hence the information available is insufficient to document more than the fact of a high incidence of psychological disturbances among the sufferers and a

chronological correlation between psychological stress and episodes of the disorder. The fact that the disease may have its onset at any age, though it is rare in infancy and childhood, that it most commonly develops in early adult life, that there is a familial incidence, and that there is evidence of a disturbance in the intrinsic parasympathetic innervation of the esophagus all favor some intrinsic organic process present or acquired early in life. Patients with achalasia have an elevated level of resting lower esophageal sphincter pressure and incomplete sphincter relaxation with swallowing. The available evidence indicates that this is caused by the loss of β-adrenergic inhibitory activity and that denervation of the sphincteric muscle is of primary importance. The difficulty in swallowing is accentuated during emotional upset but as yet too few patients have been studied in detail to provide any general psychological characterization as a group.

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Notes

1 This chapter is a revised version of the author’s chapter “Psychological Processes and Gastrointestinal Disorders” which appeared in M. Paulson, ed., Gastroenterologic Medicine, Philadelphia: Lea & Febiger, 1969. It is used here by permission.

2 For a more detailed consideration of these concepts, the reader is referred to reference 48.

3 Comparable physiological and psychological data are not available concerning benign gastric ulcer and hence this discussion is limited to duodenal ulcer. While the presence of acid gastric juice apparently is necessary for gastric-ulcer formation, chronic hypersecretion is not characteristic of gastric ulcers, except for those occurring in the immediate prepyloric region. Rather there is evidence that factors decreasing the competence of gastric mucosa to contain an acid solution are implicated. The same probably holds true for so called stress ulcers, or acute gastric mucosal bleeding, associated with bums or trauma, though ulcers occurring after head trauma sometimes are accompanied by a sharp rise in acid secretion.

4 The fact that the hyposecretors also fall into a discrete group in terms of psychological characteristics is of theoretical interest. Furthermore, not only are these characteristics essentially the same as those that have been noted among patients with pernicious anemia but also the extreme hyposecretors (achylia gastrica) constitute the population in which pernicious anemia ultimately may develop.

5 By culturally bound definitions.

6 The role of pain from a glomus tumor was a variable in this case not discussed in this summary.

7 By culturally bound definitions.