Personal Paper

Medicine without signs

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Psychiatry is often criticised for not defining the limits of its skill, but its boundaries will remain imprecise until objective diagnostic criteria can be established. Recent studies have broadened its potential scope by showing that the extent of mental disorder ranges far beyond the layman's traditional view of madness.¹ One of the more important observations is the frequency with which patients with unrecognised psychiatric morbidity present to medical and surgical specialists. The overlap between psychiatry and other clinical disciplines has become increasingly recognised; indeed, the leading neurologist Henry Miller² defined psychiatry as "neurology without physical signs."

But this is a limited view. A wide variety of medical illnesses may present with mental symptoms and, conversely, psychiatric illness often presents with physical complaints. Indeed, Miller's definition might legitimately be expanded to describe this area of clinical practice as medicine without signs. There are bodily signs of psychiatric illness, but these are subtle and not of the order looked for by the doctor seeking to confirm or refute physical illness.

Doctors have long appreciated that many patients consulting them with physical symptoms have no organic disease, but there was little attempt to study the problem systematically until Cabot reported a series of patients from Massachusetts General Hospital in 1907.³ Among 5000 outpatients he found that only 53% had organic disease; the other 47% were said to be suffering from "functional disease," including such diagnoses as uterine misplacements, neurasthenia, apprehension, and gastroparesis. Since then functional disease has been discredited as a descriptive term⁴ and we are now concerned with the positive recognition of psychiatric illness in these patients.

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Of course, the absence of organic disease does not necessarily indicate psychiatric illness. Some patients have personality traits in which amplification of physical symptoms is an enduring characteristic.⁵ Others will be reacting to transient life stresses,⁶ and others will have no explanation at all for their symptoms.

Early studies depended on unreliable clinical assessments, and the reported prevalence rates for psychiatric illness varied widely.⁷⁻¹¹ Using more reliable standardised methods, Shepherd *et al* diagnosed psychiatric illness without organic disease in 38% of patients attending a general medical clinic.¹² A quarter of patients seen in a neurology clinic¹³ and a fifth of those attending a gastrointestinal clinic¹⁴ have been similarly diagnosed.

Patterns of symptoms

A wide variety of symptoms, localised to any part of the body, may herald psychiatric illness, but certain patterns predominate.

PAIN

Pain is one of the commonest symptoms. Pain is a subjective experience which can be only incompletely communicated to another person, yet doctors not uncommonly distinguish between "real" and "imaginary" pain. A further difficulty arises with the use of the term "psychogenic," which tends to be used interchangeably with "imaginary." "Psychogenic" applies to pain which can best be understood in psychological rather than physical terms, and Bond has outlined some of its typical characteristics.¹⁵ Its onset tends to be vague with no obvious precipitant; it is indefinite and ill localised, not corresponding to dermatomes or nerve distribution; it varies with changes in mood and may be relieved by alcohol or psychotropic drugs, or by nothing at all. There is often a history of premorbid neurotic traits or mental illness.

Personality and mood influence the perception of pain,¹⁶ so not surprisingly pain is a common complaint in psychiatric illness,¹⁷ being present in half of psychiatric inpatients¹⁸ and over half of a sample of patients in general practice with emotional disorders.¹⁹ In depressive illness the preoccupation with pain may dominate the

clinical picture so completely that the patient does not appear depressed and does not readily admit to feeling depressed. Lascelles has described this in relation to facial pain²⁰: in addition to pain, the chief complaints were insomnia, fatigue, irritability, and agitation; self-reproach, suicidal thoughts, weight loss, and retardation were uncommon.

NEUROLOGICAL SYMPTOMS

Headache and dizziness are the commonest psychiatric symptoms encountered in the neurological clinic.²¹ Hysterical symptoms, formerly often described by neurologists, have become rare but certain forms of hysteria continue to pose diagnostic problems. Hysterical seizures are one example, particularly when they occur in patients who also have epilepsy. Patients with hysterical seizures may be distinguished from other epileptics by their high rate of personal and family history of psychiatric illness, previous suicide attempts, sexual maladjustment, and current affective disorder,²² and by the variable pattern and other characteristics of the attack.²³ When amnesia is hysterical it may be accompanied by wandering.²⁴ The amnesia is patchy, affecting details of personal life and, typically, personal identity. Differential diagnoses include epileptic automatism and transient global amnesia. A more global disturbance of intelligence, simulating dementia, may also bring the patient to neurological attention.²⁵

CARDIOVASCULAR SYMPTOMS

For cardiologists psychiatric illness is chiefly disguised as chest pain and palpitations. There is a rich literature on the history of non-organic chest pain²⁶ with a gradual evolution of theories concerning its cause.²⁷ Many observations have come from military medicine, an early view implicating the tight accoutrements worn by the British soldier.²⁸ During the American Civil War da Costa described the characteristic features of palpitations, chest pain, rapid pulse, shortness of breath, and abnormal fatigability²⁹ and proposed that these resulted from abnormal irritability of the heart, due in turn to disordered innervation. Experience in the first world war introduced other terms—notably, effort syndrome³⁰ and neurocirculatory asthenia³¹—but, from his observations during the second world war, Wood advocated that the term effort syndrome be dropped because “a proper psychiatric diagnosis is nearly always available.”²⁷ He believed that the fundamental feature was the establishment of a link between the emotional reaction and effort through a variety of mechanisms, including misinterpretation of emotional symptoms, a conviction that the heart was to blame, and a consequent fear of sudden death on exertion.

RESPIRATORY SYMPTOMS

Breathing difficulties are closely interwoven with cardiac symptoms, and cardiac manifestations of neurosis are often associated with dyspnoea. For example, in 1929 White and Hahn reported sighing respirations in 80% of patients suffering from the effort syndrome, concluding that frequent sighing is a symptom of nervous origin.³² Similarly, Baker showed an association between sighing dyspnoea and nervous disorders,³³ while Soley and Shock believed that hyperventilation was responsible for all the symptoms of the effort syndrome and was due to an underlying anxiety state.³⁴

Patients attending general or respiratory medicine clinics may therefore have symptoms without pulmonary disease or symptoms that are disproportionately severe. Burns and Howell found that many of these patients were psychiatrically ill, with either depression, anxiety, or a hysterical reaction; the breathlessness resolved with successful treatment of the psychiatric disorder.³⁵ Factors which localised symptoms to the chest in depression included previous organic chest disease, excessive health consciousness, a family history of severe respiratory disease, and recent bereavement.³⁶

Respiratory disorders of psychological origin are essentially abnormalities of the rate and rhythm of breathing due to a persistent faulty habit or to a psychiatric illness which promotes episodic hyperventilation.³⁷ But the resulting biochemical changes may themselves cause symptoms which overshadow both the respiratory complaint and any associated psychiatric illness.³⁸ In extreme form the hypocapnia produces tetany and loss of consciousness, but milder

forms cause dizziness, fatigue, palpitations, chest pain, and paraesthesia. Diagnostic attention may thus be diverted to almost any organ in the body. Although hyperventilation is attracting more interest it may still be underdiagnosed because of insufficient consideration in differential diagnosis.³⁹

GASTROINTESTINAL SYMPTOMS

Anorexia, weight loss, vomiting, abdominal pain, and bowel disturbance are prominent symptoms of psychiatric illness, but they naturally divert attention to the gut. At least a fifth of a series of gastrointestinal outpatients were shown to have a psychiatric illness without organic disease; they were characterised by obsessional traits, previous psychological symptoms, and early parental loss.¹⁴ A similar series was distinguished from other patients with gastrointestinal symptoms by neurotic personality traits and a parental history of abdominal pain; their abdominal symptoms were relieved by treatment for depression.⁴⁰

Some patterns of gut symptoms have attracted particular interest. Persistent vomiting is one example.⁴¹ It often accompanies the refusal of food and weight loss of anorexia nervosa and is a prominent feature of the recently described variant, bulimia nervosa.⁴² Similarly, the irritable bowel syndrome has often been studied psychiatrically. This syndrome can be diagnosed by the cardinal features of abdominal pain, distension relieved by defecation, and change in the frequency or consistency of bowel movements, and psychological factors have been regarded as pre-eminent in its cause.⁴³ Several controlled studies have shown a high prevalence of psychiatric morbidity among patients attending hospital,^{44–46} although clearly other influences such as organic factors and life stresses have to be considered.⁴⁷

GENITOURINARY SYMPTOMS

In the gynaecological clinic pelvic pain, vaginal discharge, and menstrual irregularities are common presenting complaints of psychiatric morbidity, being especially prevalent around the menopause.⁴⁸ Younger women may present with infertility or sexual problems, and complete amenorrhoea may lead the girl with anorexia nervosa to consult a gynaecologist.

Other genital symptoms arouse the suspicion of venereal disease,^{49–50} with pain in the penis, pruritus ani, and offensive smells from the genitalia being the commonest symptoms. Up to 30% of patients may thus present to a genitourinary medicine clinic without objective evidence of infection.⁵¹

DERMATOLOGICAL SYMPTOMS

The belief of infection may, however, be held with delusional intensity, and a similar symptom is seen by dermatologists who are consulted by patients convinced they are infested with skin parasites.⁵² This delusion may be part of a widespread psychiatric disturbance such as a toxic psychosis, schizophrenia, or depressive psychosis. In some cases there is no other psychopathology, the personality is otherwise preserved, and the delusion remains unchanged for many years. Classification of this type of symptom is unsatisfactory but some authorities regard it as a monosymptomatic hypochondriacal psychosis.⁵³ The prognosis, previously considered to be gloomy,⁵² is now viewed more optimistically after successful treatment with pimozide.^{54–55}

Dermatitis artefacta is another unusual condition that masks psychiatric disorder. Diagnosis is difficult unless suspicion is aroused by the bizarre nature of the lesions. They are often necrotic with sharp, geometrical outlines and are seldom distributed symmetrically but occur in sites accessible to the patient's right hand (or left hand if he is lefthanded).⁵⁶ A wide variety of psychiatric illnesses, personality problems, and social difficulties are associated and the dermatitis may be only one incident in a long history, with recovery being related more to maturation and changed circumstances than to treatment.⁵⁷

DISTURBANCE OF BODY IMAGE

Cotterill has drawn attention to the disturbance of body image that accompanies skin complaints, usually associated with depression.⁵⁸

The most striking disorder of body image is the generalised disturbance of anorexia nervosa. Classically the patient believes herself to be overweight and overestimates her bodily dimensions but often refuses to admit this disturbance; it may also be camouflaged by other symptoms. Alternatively she will make protestations of radiant health and resist medical referral.

Localised disorders of body image lead to requests for cosmetic surgery. The patient complains of ugliness or deformity of one part of the body which to an observer appears quite normal or only minimally disfigured. The nose, chin, ears, and breasts are the commonest sources of complaint in this condition, to which the term dysmorphophobia has been applied.⁵⁹ Although dysmorphophobia has been regarded as a recognisable syndrome,⁶⁰ a diagnosis should be based on the associated psychopathology, whether this be a depressive illness, psychosis, or, more often, a disturbance of personality.⁶¹ Some follow up studies have shown that patients with minor deformities may derive considerable psychological benefit from surgery.⁶²⁻⁶³ A more recent study, however, has reported a higher rate of severe neurosis and schizophrenia in patients who had had a rhinoplasty for cosmetic reasons than in those operated on for disease or trauma.⁶⁴ Psychological and social background should therefore be carefully assessed before surgery is considered and a specialised psychiatric opinion sought in difficult cases.⁶⁵

Underlying psychiatric syndromes

What are the psychiatric syndromes that underlie these complaints? The affective disorders, depression and anxiety, are by far the commonest but the mood disturbance and characteristic patterns of thinking are not volunteered. They have to be elicited by direct inquiry, and the doctor's interviewing style is all important.⁶⁶ In phobic neuroses the somatic symptoms are intermittent, developing only when the patient is in contact with the phobic stimulus. Agoraphobia is the commonest example.

Anorexia nervosa is another underlying syndrome which is being increasingly recognised; there may also be a true increase in its incidence.⁶⁷ The cause is presumed to be psychological, and a detailed psychiatric interview will reveal characteristic psychopathology. The related condition, bulimia nervosa, differs in that weight loss is not severe and no body image disturbance is apparent. Nevertheless, many bulimics have a history of anorexia nervosa.

The other syndromes commonly associated with physical presentation—hysteria, hypochondriasis, and artefactual illness—are less well classified. They have in common a conviction of physical illness, repeated medical consultations, and denial of psychological complaints. They are best thought of as maladaptive patterns of learnt behaviour, affecting people who find the sick role attractive because they lack the strength to cope with the demands of everyday life or because they receive attention and sympathy from other people only when they are ill.⁶⁸

Traditionally hysteria has been thought to be the simulation of physical illness through unconscious mental mechanisms, but it is difficult to separate it from conditions in which the patient is assumed to have insight into his behaviour. The symptoms resemble those of neurological illness and are classified into two broad groups, conversion symptoms, which involve disturbances of motor or sensory function, and dissociative symptoms, which affect the higher mental functions of consciousness, memory, and intelligence.

Another manifestation of hysteria, Briquet's syndrome, is a recognisable pattern of symptoms in young women.⁶⁹ They have a complicated medical history with multiple somatic complaints, often gynaecological. Their behaviour towards their doctors is manipulative and they have a history of repeated hospital admissions and operations.

This type of behaviour merges imperceptibly with hypochondriasis, which is defined as a morbid concern with physical or mental health.⁷⁰ Although hypochondriacal complaints may result from a psychiatric illness such as depression or anxiety, in general hospital practice patients are seen in whom hypochondriasis is the primary disorder,⁷¹⁻⁷² the symptoms occasionally being psychotic.⁵³

Gross personality disturbance usually underlies the deliberate feigning of illness described by Asher as Münchausen's syndrome.⁷³ The presentation is so dramatic that an acute medical or surgical crisis is suspected. Diagnosis is particularly difficult in patients, often with medical connections, who cause artefactual illness by surreptitiously ingesting drugs or by inducing unusual haematological disorders.⁷⁴

In search of explanations

Why do some patients present with somatic complaints and minimise the psychological component of their illness? An answer to this question would help to improve the delivery of medical care for many who now mislead themselves and their doctors about the nature of their complaints and the treatment required.

Most of the somatic complaints reported by our patients are amplifications of normal physiological sensations or the minor muscular aches that affect everyone⁷⁵: the erroneous interpretation is responsible for their presentation to doctors. During episodes of psychiatric illness many physiological functions are altered and the changes are likely to be interpreted in a morbid way. Tyrer has proposed a modification of the James-Lange theory to explain this.⁷⁶ In morbid states of emotion the subject may not recognise the stimulus which provokes the somatic feelings of physiological arousal, particularly if the stimulus is an internal, psychic one. He does not understand his bodily feelings and regards them as primary phenomena.

The stigma attached to psychiatric illness is no doubt partly responsible for the somatic facade, as is the belief that doctors are more interested in physical than emotional complaints. For their part doctors find it difficult to recognise psychiatric illness presenting in this manner.⁷⁷⁻⁷⁸ Overzealous investigation has also been implicated. Kreitman and his colleagues, in their study of hypochondriasis, claimed that "physical investigations undoubtedly gave powerful reinforcement to the patients' fears or beliefs in a substantial proportion of cases, and often helped to localise and perpetuate a previously nebulous and perhaps transitory concern."⁷⁹

Somatic complaints are influenced by advancing age,⁸⁰ family history,⁷⁹ and previous illness.³⁶ Social class is also important: lower class patients are particularly likely to express psychological distress in physical terms.⁸¹⁻⁸³ In a study of outpatients with neurotic illness 59% of patients from social classes IV and V presented entirely with somatic symptoms whereas only 4% of patients from classes I and II presented in this manner.⁸¹

Transcultural studies have underlined the influence of the patient's wider cultural background. Published reports consistently emphasise that somatic symptoms in mental illness are much commoner in developing countries than they are in Western cultures, and this observation has prompted research into the vocabulary through which emotions may be expressed.⁸⁴ Translating standardised interviews into many different languages has shown that the native languages of several developing countries lack words equivalent to the rich emotional vocabulary available to Westerners. They use instead words or phrases which refer to bodily symptoms, particularly in the chest. Leff has postulated an evolving awareness of the psychological experiences of emotion which is accompanied by changes in the meaning of words and the development of new words and which is related to a shift in cultural focus from the group to the individual.⁸⁴

But how can we explain somatic presentation in Western cultures with rich vocabularies? Even highly intelligent and educated people may be unaware of the psychological origins of their somatic complaints. They seem to suffer from "alexithymia"—the lack of facility to verbalise their emotions.⁸⁵

Doctors therefore have a dual task in diagnosis. Firstly, they should conduct the clinical interview so that they elicit the psychological symptoms which lie behind the somatic facade. Secondly, they should educate their patients to recognise the emotional origin of their symptoms—and perhaps psychiatry has a wider role in this aspect of health education. It is tempting to conclude that the somatic presentation of mental illness, particularly neurosis, reflects a lack of cultural and individual psychological sophistication. With increasing psychological awareness on the part of patients and their doctors, the symptoms described here could become less common, mental illness then

presenting with mental symptoms rather than disguised as an ailment of the body.

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