Reading about

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Psychosomatic pain

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As a psychiatrist working in the field of pain, it is commonly assumed that I devote most of my attention to people who have pain as a result of stress or psychological difficulties. Indeed, 24 years ago when I first started seeing individuals in chronic pain who had been referred to me in a pain clinic because it was thought that organic factors were insufficient to explain the complaint of pain, I looked carefully for psychiatric and psychological explanations. Despite the fact that one-third of people attending our clinic had evidence of psychiatric illness (Tyrer *et al*, 1989), it has become clear to me from those I see that such psychiatric morbidity is largely a result of chronic pain and is not a forerunner of a painful state. The vast majority of people I see in a multidisciplinary pain clinic have a clear organic cause for pain either in the present or past, and it is rare to have a patient with pain arising purely from emotional causes. There is evidence of environmental and social factors affecting the exhibition of pain. Psychiatric illness is more common in people with pain referred to psychiatric out-patient clinics (Merskey, 1965; Merskey *et al*, 1987), but in total the evidence for organic factors leading to distress in vulnerable individuals is overwhelming.

A sizeable number of people in distress from chronic pain do not have enough signs of illness to persuade doctors that organic factors are sufficient to explain their symptoms. These individuals usually show intense conviction of disease, strong adherence to mechanistic explanations of their illness and considerable functional disability arising from the painful complaint. They are undoubtedly in distress and they score highly on symptoms of depression and, to a lesser extent, other psychiatric illnesses. Why these people present in the way they do cannot be deduced solely through application of the medical model.

PAIN AND MIND–BODY DUALISM

The word pain comes from the Latin *poena*, which means punishment or penalty, after the Roman goddess of punishment. The term was originally used for the punishment of an offence against the law. Over time the word was increasingly used to denote suffering, particularly if this had resulted from a blameworthy act.

Early writers equated emotional suffering with pain and the words were used interchangeably. This psychological dimension to the experience of pain was largely forgotten following Descartes' observations illustrating pain as a signal of physical pathology:

> 'quand je ressens de la douleur au pied, la physique m'apprend que ce sentiment se communique par le moyen des nerfs dispersés dans le pied, qui se trouvant tendus comme des cordes depuis là jusqu'au cerveau, lorsqu'ils sont tirés dans le pied, tirent aussi en même temps l'endroit du cerveau d'ou ils viennent et auquel ils aboutissent, et y excitent un certain mouvement que la nature a institué pour faire sentir de la douleur à l'esprit, comme si cette douleur était dans le pied' (Descartes, 1647).

Although not anatomically precise this work convinced scientists of the relationship between the integrity of sensory nerve conduction and the experience of pain. The experimental work then conducted supported the views of doctors that pain was due to tissue damage, so in those complaining of pain there must be a source of injury. The concept of non-organic pain was not considered important at this time. It was not until Breuer & Freud (edition 1957), in detailed case histories originally published in their studies on hysteria in 1895, suggested that pain could be a manifestation of a psychological problem, that the contribution of psychological factors to pain was reconsidered. The profound influence of Freud shaped the belief in psychological and psychiatric circles that persistent pain associated with emotional distress in the absence of organic findings is primarily due to a psychiatric illness. This was not generally acknowledged by physicians although a number of pain specialists have realised the importance of psychosocial factors in the presentation of patients with chronic pain (Fields & Price, 1994; Livingston, 1998). Dr Livingston, a surgeon writing in the middle of the past century, disagreed with the concept supported by many doctors at the time that pain, without physical findings, is hysterical or due to malingering.

PSYCHIATRISTS AND PAIN

The concept of 'emotional pain' occupied a select group of British psychiatrists in the 1960s and Erwin Stengel proposed a variety of mechanisms to explain this phenomenon. Stengel was born in Vienna as an identical twin and came to England in 1938 following the occupation of Austria by Hitler. He was intrigued by those who seem to be impervious to pain and described case studies of this phenomenon. More than most, he understood that mechanistic models were inadequate to explain the gamut of experiences described by people with pain. The controversy between Stengel and Eliot Slater about this issue, published in the *British Journal of Psychiatry* 40 years ago (Stengel, 1965), neatly encapsulates the mind–body dualism that was adopted by most practitioners in a more convergent explanation of the origin of pain (Slater, 1966).

Stengel's work in this area led to a sprouting of interest in Sheffield, where he was the first head of the university's Department of Psychiatry at this time. Three junior psychiatrists in his Department have since become prominent researchers in this area – Harold Merskey, Izzy Pilowsky and Sir Michael Bond. All

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have contributed massively to the contribution of psychiatric and physical features to the perception of pain, an area into which, sadly, psychiatrists in the UK nowadays rarely venture.

At the same time that Stengel was articulating his views in England, psychiatrists in the USA developed psychological theories to assist in the management of pain in the New World. The established physician and truncated phonemic associate George Engel believed that, although pain may originally develop from an external source, it often becomes a psychological phenomenon (Engel, 1959). He described risk factors for developing chronic pain, including a history of defeat, significant guilt, unsatisfied aggressive impulses and a history of real or imagined loss. Later, Blumer & Heilbronn (1982) described a group of patients who developed chronic pain who had a strong work ethic and were preoccupied with their pain. As these individuals later developed many of the vegetative symptoms of depression, these authors unwisely generalised that chronic pain in such people is a manifestation of depression.

EFFECTS OF PAIN ON PERSONALITY

Although Engel (1959) and Blumer & Heilbronn (1982) correctly described factors predisposing to the genesis of chronic painful syndromes in a selected group of patients, the generalisations they made dissuaded colleagues working in this field that the biopsychosocial model espoused by these psychiatrists was necessarily relevant (Engel, 1977). Later studies showed that the development of psychiatric illness more usually follows the development of the chronic painful condition, and 'pain-proneness' is not demonstrable in most patients (Gamsa, 1990). The reason why most people in pain complain of distressing symptoms is because of the debilitating and demoralising effects of the pain itself. This contention was supported by an intriguing study carried out 20 years ago. At that time the Minnesota Multiphasic Personality Inventory (MMPI) was a widely used tool in the investigation of those with chronic pain. The typical profile of an individual who had developed chronic pain and had the psychological disposition to do so was a component of high scores on the neurotic triad, the depression, hypochondriasis and hysteria sub-scales, of this instrument. This picture was found in a large proportion of a group of patients being assessed for back-pain surgery. By chance, a number of the individuals concerned had previously been tested with this instrument in an earlier epidemiological study. In these people it was found that their premorbid profiles were within normal limits, strongly suggesting that the painful condition from which they were suffering was responsible for the apparent change in the personality picture (Hagedorn *et al*, 1985). Love & Peck (1987) later showed that this particular MMPI profile found in patients with chronic pain did not represent previous personality functioning but was a consequence of disability.

SOMATOFORM DISORDERS

A minority of patients with chronic pain do fulfil the criteria for the diagnosis of a somatoform disorder. In such conditions there is continued presentation of physical symptoms together with persistent requests for medical investigations despite negative findings of organic illness and reassurance by doctors that the symptoms have no physical basis. The diagnosis *par excellence* of a somatoform disorder is somatisation disorder, where pain is just one of many symptoms exhibited by the (usually) female patient. This diagnosis is not common, ranging from 0.2% of patients referred to a liaison psychiatry service (Smith *et al*, 2000) to 5% of medical patients (Fink *et al*, 2004). This figure is higher than the previous figure of Smith *et al* (2000) because Fink *et al* (2004) used ICD–10 criteria. The ICD–10 diagnosis of persistent somatoform pain disorder was 1.5% in this same population (Fink *et al*, 2004). This low figure is not too surprising, as the latter diagnosis can be made only if the pain described by the patient 'occurs in association with emotional conflict or psychosocial problems that are sufficient to allow the conclusion that they are the main causative influences' (World Health Organization, 1992: p. 168). Contrast this with the diagnosis of pain disorder listed in the somatoform disorders section in DSM–IV (American Psychiatric Association, 1994). For this diagnosis to be made, 'psychological factors are judged to have an important role in the onset, severity, exacerbation, or maintenance of the pain' (p. 461). Although cases largely due to physical illness are excluded, as also are cases where the pain is 'better accounted for by a mood, anxiety or psychotic disorder', more cases with pain and emotional sequelae achieve this level of diagnosis on the DSM–IV schedule than on ICD–10.

The differentiation of the somatoform disorders has been questioned (Wessely *et al*, 1999). The problem with the diagnosis of somatoform disorders in general and of somatoform pain disorders in particular is the judgement required that the symptoms manifest are due to psychological factors. It is not easy to determine this objectively and most psychiatrists working in the area are aware that physical and psychological factors both contribute significantly to the presentation (Mayou, 1991; Merskey, 2000). The evidence of psychological causation cannot be assumed from a history of previous risk factors. The reporting of unexplained pain symptoms as due to previously experienced psychological trauma has been found to be an artefact of retrospective self-report rather than a consequence of actual events (Raphael *et al*, 2001). This being said, there is evidence that some non-organic pains arising in adolescence have a psychogenic basis (Hotopf *et al*, 1999).

The value of the present classifications of these syndromes has been brought into question because of the imprecise categorisation of such disorders and the fact that many patients fall into the category of undifferentiated somatoform disorder, a watered-down version of somatisation disorder (Bass *et al*, 2001; Sharpe & Mayou, 2004). Dimensional assessment of pain on the axes of nociception, evaluation of pain, mood consequences of the pain and pain behaviour (Karoly & Jensen, 1987; James, 1992) may be of greater clinical relevance.

BOOKS ON PSYCHOSOMATIC PAIN

Edward Shorter, the prominent medical historian, has shown how the symptoms of psychosomatic illness have changed over the years. He believes that these symptoms are presented according to the prevailing culture. In the early 1800s, for example, a current concept to explain back pain was spinal irritation, caused by pressure at specific spinal tender spots, leading to nerve and muscle pains. Shorter's contention is that psychosomatic symptoms are selected carefully from a culturally determined

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symptom pool to give the impression of origin from an underlying organic disease, thus avoiding ridicule (Shorter, 1992). This assumption is supported by the changing terminology of diagnostic labels such as hysteria and neurasthenia.

A recently published book argues that fear of pain explains the high prevalence of psychological distress in patients with chronic pain (Asmundson *et al*, 2004). There are two schools of thought to explain why a minority of people behaves in this way; these are interrelated. One claims that a catastrophic meaning is placed on the experience of pain because of the fear of injury or re-injury. The other suggests that fear of pain is due to fear of anxiety-related sensations associated with painful episodes. This hypothesis has led to treatment by graded exposure to such situations to enable individuals to learn to manage both anxiety and pain together (Vlaeyen *et al*, 2002). For more general reading on psychosomatic disorders, books by Chris Bass (1990) and Peter Manu (2004) are recommended.

As is usually the case with a medical condition that is imperfectly understood and has no established cure, there is a plethora of books for sufferers from pain. One that has received considerable plaudits from patients is *The Mindbody Prescription*, on treatment for back pain (Sarno, 1998). Dr John Sarno believes that tension is the underlying cause of many back problems. He states 'Pain serves to smother the emotions so they don't break through to the conscious mind. The brain produces these symptoms as . . . a distraction to make sure your internal rage does not come out' (p. 39). Although treated with scepticism by his medical colleagues Dr Sarno is clearly appreciated by many pain sufferers in North America. A useful part of the therapy process is educational, in the form of a lecture presentation in which the temporal relationship between emotional feelings and pain is recognised.

THE FUTURE

The specialty of pain has grown considerably over the past 25 years and the influence of the psyche on painful symptoms and vice versa has become much more widely recognised. The difficulty in disentangling the mechanisms involved in this relationship will be clear to those who have read to the end of this piece. Those wishing to obtain more information are recommended to contact the International Association for the Study of Pain (IASP; http://www.iasp-pain.org).

It is in many ways paradoxical that in the UK the vast majority of doctors working in the pain field are anaesthetists, with only a scattering of pharmacologists, neurologists, orthopaedic surgeons and psychiatrists. The value of psychological assistance is more widely recognised. The IASP recommends that all first-class pain clinics should have at least four healthcare professionals on the staff. This is a rare situation in Britain. Until the field of chronic pain is recognised in liaison psychiatry job plans, there is unlikely to be major input from psychiatrists in the UK into chronic painful conditions. If a Faculty of Pain Medicine or similar organisation were to be designated, this might change.

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