PSYCHOGENIC PAIN

L E C Lim

ABSTRACT

Pain is a symptom commonly encountered by the medical profession. After excluding organicity, the possibility of psychogenic mechanisms should be borne in mind. Diagnostic clues in the history and physical examination are outlined. An early referral to the psychiatric services minimises wastage of time and resources but requires skilful handling and sensitivity on the part of the referrer. Patients do not regard themselves as psychologically abnormal and are often resentful and angry when referred for psychiatric evaluation. Principles of management are described with emphasis on establishing an early rapport. Cognitive behavioural methods appear promising but require further evaluation in controlled studies.

Keywords: Psychogenic pain, somatisation, somatoform, hypochondriasis

Introduction

Pain is one of the commonest symptoms which results in a decision to seek medical help. Most patients are reassured, when after assessment, they are told that no abnormalities are found. Some, however, are not so easily reassured. They visit other doctors to seek further opinions, often requesting or demanding for tests and ending up getting angry and frustrated with their doctors. The latter, likewise, become increasingly resentful and irritated by the importuning behaviour of their patients. The unnecessary tests, even surgical operations, carried out to investigate the source of the symptoms, have important cost implications both for the patient as well as for the health services. It is therefore important to diagnose psychogenic pain and institute proper psychiatric management early, so as to avoid the many pitfalls, and the unnecessary wastage of time and resources for health care professionals and patients alike.

Diagnostic criteria

Psychogenic pain may be conceptualised as one where, despite appropriate and adequate evaluation, no organic basis for the symptoms are found. The pain is solely attributable to psychological factors which these patients are usually reluctant to discuss.

Psychogenic pain may also be diagnosed in the presence of organic pathology. However, the complaint of pain or resulting social or occupational impairment is grossly in excess of what would be expected from the physical findings.

Diagnostic clues

Psychogenic pain tends to have the following characteristics:
(a) there is no clear-cut onset,
(b) it is poorly localised,
(c) it occurs in multiple sites and extends over an increasing area,
(d) it varies with changes in the patient's mood,
(e) it may be relieved by alcohol and/or psychotropic medication,
(f) it is seldom relieved by analgesic medication,
(g) it does not disturb the patient from sleep,
(h) neurotic symptoms are often present,
(i) a personality disorder is often associated.

Differential diagnosis

Somatoform pain disorder

The main complaint is that of pain which must have lasted for at least 6 months, having also fulfilled the above 2 criteria for psychogenic pain.

Hypochondriasis

The preoccupation is not with symptoms but with what the symptoms mean to the patient. Often, there is the fear of having or the belief that one is suffering from disease. Such beliefs or fears have arisen as a result of misinterpretations of bodily sensations as evidence of physical pathology.

Somatisation disorder (SD)

The history of physical complaints with onset before age 30 and persisting for several years alerts one to the diagnosis. According to the 3rd edition (revised) of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) this diagnosis is made when at least 13 symptoms from a checklist of 35 symptoms are present. The symptoms can be classified according to the following systems:
(a) gastro-intestinal,
(b) cardiopulmonary,
(c) conversion or pseudoneurologic,
(d) sexual dysfunction,
(e) gynaccologic,
(f) pain symptoms.

In view of the stringent criteria used in DSM-III-R many patients who do not fulfill the criteria are classified under the category "undifferentiated somatoform disorder". The 10th edition of the International Classification of Diseases (ICD-10) uses a less restricted frame of reference. A symptom list is not included although the symptoms must be present for at least 2 years for the diagnosis to be made.


Pain secondary to psychiatric disorders

Depressive illness
Depressed patients often report pain symptoms. The pain may be due to the following factors:
(a) pain threshold is lowered in depression
(b) brain endorphin levels are altered in the course of a depressive illness

Conversely, patients with chronic pain may subsequently develop symptoms of depression.

Anxiety states
Pain is also a frequent symptom in patients suffering from anxiety states. Heightened levels of muscle tension around the head, chest, back and limbs result in fatigue and pain is felt in these areas. Increased arousal may lead to greater awareness of bodily sensations. Mild sensations may thus be perceived as painful ones under these circumstances.

Schizophrenia
It is well known that schizophrenic patients have high tolerance for pain. Some, in their psychotic state, could cut and mutilate themselves without experiencing any pain, yet others who have tactile hallucinations or passivity experiences may complain of pain in the affected parts of their bodies. Although present in schizophrenia, tactile hallucinations are nevertheless rarer than auditory hallucinations and, if present, necessitate a search for an organic aetiology.

Mono-symptomatic hypochondriacal psychosis (MHP)
According to Munro's description of this relatively rare condition, MHP is an illness characterised by a single hypochondriacal delusion that is sustained over a considerable period of time. It is not secondary to another psychiatric illness and the personality remains, otherwise, well preserved.

Gains derived from the pain
Pain symptoms may be consciously/unconsciously used for personal gain. Such mechanisms may operate even in those with genuine organic pathology and in those with obvious mental illnesses. Whether the motivation is consciously or unconsciously produced is difficult for the outsider to prove.

Gains may be obtained in the following situations:
(a) unpleasant emotions which have not been expressed could be displaced into a physical symptom.
(b) the symptom could be the means of alleviating one's guilt, eg pain is experienced after the death of an ambivalently regarded individual.
(c) pain could be used as an excuse from performing one's duties.
(d) after industrial accidents, where compensation issues have not been resolved, symptoms continue to linger on.
(e) as a manipulative tool, eg to induce guilt for having been asked to perform unpleasant tasks.

Principles of management

Psychiatric referrals
Referrals to the psychiatric services require some degree of tact and sensitivity on the part of the referrer, since most patients are convinced they have a physical and not a psychological disorder. Hence, it may be worthwhile to reassure the patient that, while the physician does not think he/she is mentally unwell, "stress" and "tension" may bring about his/her symptoms. A psychiatric colleague is then recommended as one who could help the patient to explore and suggest ways of coping with the stress.

However, it is unwise to withhold information about the specialty of the doctor the patient is being referred to. When the patient discovers for himself/herself that the "colleague" is a psychiatrist it will provoke a sense of distrust and resentment towards the referring physician. This would in turn undermine subsequent efforts by the psychiatrist to help the patient.

Establishing rapport
It is very important for rapport to be established early. This could be achieved by inquiring into the patient's feelings about the referral. An empathic approach and reassurance that the patient is not insane to be seeing a psychiatrist would help dissipate some of the negative feelings about the referral.

History taking
While obtaining the history (see Table 1), stress factors should be sought in the areas of early childhood experiences, education, family, occupation, marriage, sexual, social and financial aspects.

Alcohol and drug history is important as well as information about pre-morbid personality. It is also useful to know if there were serious physical illnesses or deaths amongst family members or friends. This is because the patient's symptoms may often resemble those present in relatives/friends who had been physically ill.

Table I - Questions to ask about the patient's pain

| 1. | When did the pain first start? |
| 2. | Where is the pain felt? |
| 3. | When does the pain occur? |
| 4. | How intense is the pain? |
| 5. | Does pain intensity vary throughout the day? |
| 6. | What factors make the pain better? |
| 7. | What factors worsen the pain? |
| 8. | What is the effect of movement or change in posture on the pain? |
| 9. | As a result of developing the pain, what activities have been done less frequently/avoided and what activities are performed more frequently? |
| 10. | Does mood affect the pain? |
| 11. | What effect do drugs have on the pain? |

Physical examination
It is recommended that the psychiatrist should physically examine the patient. Patients are more likely to accept explanations about their pain from a doctor who has
examined them. Signs to alert the psychiatrist to the presence of non-organic pathology include:

(a) weakness of all muscle groups in a particular region of the body,
(b) superficial tenderness,
(c) production of pain when manoeuvres are employed which the patient thinks will cause pain when in fact the procedures are painless.

Investigations
Based on the history and physical examination, doctors must decide what investigations are appropriate. Further investigations, if necessary, should be completed quickly and with the minimum of fuss so that psychiatric management may commence. Bass has described 3 kinds of responses to negative investigation results:
(a) an attitude of disbelief, anger or resentment which carries a poor prognosis,
(b) a sense of relief or gratitude associated with a favourable outcome,
(c) an expression of relief yet the patient continues to pursue further opinion from other specialists.

Limits must be set on the number of investigations that are to be carried out. It is suggested that a "final investigation" should be agreed upon with the patient. By agreeing to carry out further investigations at the patient's request, the doctor may inadvertently encourage the patient to think:
(i) that he (the doctor) is suspecting the presence of an organic problem,
(ii) the patient continues to focus on physical issues rather than psychological ones.

Limiting unnecessary referrals to other specialists
The doctor should also firmly decline to unnecessarily refer the patient for other specialist opinions. Nevertheless, he should, in order to avoid missing a physical diagnosis, be on the look-out for the development of new symptoms and be willing to have these investigated, if necessary.

Diagnostic formulation
Having completed the clinical, radiological and laboratory assessment of the patient, the doctor should ask himself the following questions:

(1) is there evidence of existing physical disease or past tissue damage?
(2) if so, has pain persisted beyond the time healing would have been expected to take place?
(3) is there evidence of psychiatric illness, and if this is present, is it primary or secondary?
(4) are there emotional conflicts or psychosocial problems or compensation issues that are associated with the onset of the pain or with its continued maintenance?
(5) is there any suggestion of malingering?
(6) is there a personality disorder?

Treatment

Medication
Avoid prescribing medication which is not indicated. The author has seen cases of muscular chest pain being treated with anti-angina medication. Obviously such medication will only reinforce the erroneous belief in a cardiogenic element to the symptoms. Unnecessary medications should be gradually withdrawn. This will not be easily accomplished because patients are often psychologically dependent on such medications whose withdrawal will be likely to produce much anxiety.

Benzodiazepines
Although extremely effective as anxiolytic agents, they should be used for a limited period, on an intermittent basis and in minimal dosages in view of their potential for inducing dependence.

Tricyclic antidepressants (TCA's)
The effectiveness of TCA's extends beyond their antidepressant action.

Imipramine has been useful as an anxiolytic agent and also ameliorates hypochondriacal symptoms. In addition, it has also been claimed that TCA's have analgesic properties irrespective of whether the patient is depressed or not. In cases where it is uncertain whether the depression is primary or secondary, it might be worthwhile to give the depression the benefit of the doubt and commence antidepressant medication.

Major tranquillisers
Small doses of thioridazine, chlorpromazine, or haloperidol could be used as anxiolytic agents. They could also be used to potentiate the hypnotic effect of the benzodiazepines. In patients with personality disorder, or in those with a potential for substance abuse or a history of taking drug overdoses, major tranquillisers would be preferred over the tricyclic antidepressants and benzodiazepines when anti-anxiety/hypnotic action is required. This is because antidepressants can be fatal when taken in overdoses and benzodiazepines subject to abuse.

Psychological treatments

Cognitive behavioural therapy (CBT)
Since the late 1980's psychological treatments using cognitive behavioural strategies have been described for hypochondriasis and illness phobia. Studies into the efficacy of these interventions have involved small numbers of patients and have mostly been uncontrolled.

Patients' interpretations about their bodily sensations are discussed and challenged using behavioural experiments to test out the validity of their beliefs. The aim is to demonstrate to the patient that their symptoms can be influenced by factors other than the ones they believe are responsible. The patient is encouraged to test out the effectiveness of avoidance behaviour to see if it keeps them safe from serious harm. Conversely, he is asked to gradually engage in activities he had been avoiding to convince himself that no deleterious effects on his health would occur. Reassurance is discouraged. Instead, exposure to illness cues and prevention of reassurance produced rapid improvement.

Out of 40 patients with chronic pain, Phillips studied
the effect of CBT on 25 patients and compared the results with 15 patients on a waiting list as controls. Impressive results in 83% of the treated cases were reported. The most important effect of the therapy was the development of a sense of control and mastery over the pain. Other cognitive techniques involve the use of positive imagery and attentional diversion110.

Although initial results of the efficacy of CBT on pain and hypochondriacal patients have appeared promising, controlled trials using larger sample sizes are required for validation of these findings.

Biofeedback
Relaxation training using biofeedback110 can help the patient self-regulate physiological functions and to lower his or her overall level of arousal.

Self hypnosis
Self-hypnotic techniques116,113 have been employed to help the patient reprogramme his negative self suggestions and replace them with positive ones.

Psychotherapy
Kellner119 has described a technique which he claims is effective in hypochondriacal patients. He advocates repeated physical examinations and reassurances as a means of providing immediate relief from anxiety symptoms. His views are, however, at variance with those practising CBT.

Group psychotherapy
Stern and Fernandez119 have shown in a small study involving 6 patients that group cognitive behavioural treatment for hypochondriasis was effective in reducing visits to the doctor and in time spent thinking about their symptoms.

Family therapy
Living with a member of the family constantly complaining of pain and seeking reassurances can be exhausting and stressful. Hence, relatives of patients need an opportunity to ventilate their feelings. During family therapy, relatives learn how to deal with illness behaviour and repeated requests for reassurance.

Supportive psychotherapy
For patients who are not suitable for CBT or other forms of psychotherapy, the doctor should continue to show empathy, warmth, give advice wherever appropriate and encourage the patient towards adopting healthy behaviours. He should continue to engage the patient in exploration and discussion of the psychosocial issues but pay little attention to his somatic symptoms. He should be aware of his own negative counter transference towards the patient and refrain from acting in a hostile, irritated and rejecting manner towards the latter.

Once a rapport with the therapist has been achieved a patient with previous tendencies to doctor-hop usually ceases to do so.

Prognosis
Although reliable data is lacking, it is generally believed that the following are associated with a good prognosis125:

1. ability to be "engaged" into a treatment alliance,
2. young age,
3. absence of compensation issues,
4. work satisfaction,
5. continuing employment,
6. patients whose spouses have low hypochondriasis scores.

Factors associated with unfavourable outcome are as follows:
1. constant unremitting pain119,
2. pain which is not aggravated by stress or anxiety199,
3. patients with a long history of unsuccessful surgery for pain137,
4. patients whose pain symptoms are not preceded by stressful life events120,
5. patients with more dysfunctional beliefs and assumptions about the origins of their symptoms, and who continue to insist on a physical aetiology despite a lack of medical evidence121,
6. absence of anxiety and depression,
7. treatment resistant affective disorder122.

References