Psychogenic pain

CHAPTER CONTENTS

Introduction

Unless the patient has reasons for 'malingering' – the symptoms are simulated for compensation or litigation motives – pain is always indicative of some degree of dysfunction.[1] In most instances, the dysfunction is physical. Sometimes, however, the pain is devoid of any organic basis. If the patient has an unconscious belief in the reality of the symptoms, a psychogenic disorder is likely. The pain is then labelled 'inorganic' or 'functional'. There is an emotional illness and, although no peripheral tissue damage exists, the pain is as distressing as is somatic pain.

Pain is often the outcome of a combination of physical and psychological causes. It is a highly complex phenomenon: psychological factors affect the way people experience and express pain;[2] conversely, chronic pain often results in secondary personal difficulties.[3,4] Because pain is an abnormal affective state (though called into being by physical changes in the body), a heightened awareness may increase the severity of the symptoms. The patient may then present with irrational complaints that obscure genuine factors.[5]

The detection of disorders which have their origin in the patient's mind or from the desire to elicit sympathy or compensation is simple if the patient is examined by the methods set out in this book. However, it is more difficult to assess those who present with an organic lesion with psychogenic overlap. Here, much patience and clinical experience will be required to unravel the complicated clinical picture.

Orthopaedic medicine and psychogenic pain

Importance of immediate diagnosis

After the first attendance it is important to decide whether the patient does or does not have an organic lesion; this may be more difficult in an organic lesion with strong psychogenic overlap but, if the physician is alert, strong suspicion is usually aroused. For the sake of both patient and physician, psychogenic pain ought to be detected at once. If active treatment is applied to a patient who is dissembling or who is enmeshed in a compensation claim, nothing but an allegation of making symptoms worse can be expected. Also, in pain of 'inorganic' origin, the treatment will be completely inefficient and endless – the malady does not worsen but it never improves either. This is not only extremely discouraging to the physician and therapist but will also worsen the patient's mental state.

Conversely, it is unethical to regard the patient's symptoms as being devoid of organic basis simply because a treatment is unsuccessful. The label 'psychogenic pain' can never become an excuse for the physician's failure; it can only be given at the first interview and before any treatment is instituted.

Importance of a positive diagnosis

The diagnosis 'psychogenic pain' should be made on the discovery of positive inconsistencies during orthopaedic assessment and not as the result of supposition about possible psychological factors, such as anxiety, depression, stressful life situation or family dissatisfaction. A patient regarded as psychoneurotic can develop a genuine orthopaedic condition in parallel, and concentration on the psychological problem may distract the examiner from the organic cause of the pain. When there is an organic cause, thorough orthopaedic examination will reveal a simple and consistent pattern that markedly

contrasts with the excessive nervous behaviour of the patient. The mechanofunctional aspects of the body are well defined and easy to interpret. In pain not of organic origin, the findings are self-contradictory and, given enough opportunity, the patient will sooner or later demonstrate inconsistencies.

To establish that there is not an organic basis for symptoms is extremely important in order to protect the patient from endless therapy or repeated surgery. However, to make an objective distinction between the different types of inorganic pain – whatever names they are given – is extremely difficult and requires further (psychological) assessment. An orthopaedic physician should beware of using diagnostic labels such as 'hysterical', 'hypochondriac', and 'regressed'. Because such classification depends merely on the doctor's sympathy or lack of it, it results in poor communication and engenders negative perceptions of the patient and a sense of pessimism regarding the prognosis.

Pitfalls for the examiner

The examiner must try to keep a balance between excessive scepticism and naïve trust. Not every statement should be accepted unconditionally but, conversely, not every patient with a symptom that differs from the usual should be regarded as suffering from an imaginary disorder. However bizarre the behaviour of the patient, the examiner should always face the clinical situation with an open mind that takes note of, and registers, the statements and findings. The diagnosis is then substantiated by the discovery of positive inconsistencies. The most important pitfalls are:

- the manner of the patient
- the obscurity of the history
- the potential bias of the examiner.

A patient with chronic pain who has seen several practitioners without benefit feels under suspicion or begins to have self-suspicion and develops the behaviour of a suspect. Strong emphasis on symptoms may occur with attention-seeking activity so as to convince the physician by exaggeration. However, it is not so much the current performance of the patient that may convince the physician that there is not an organic lesion but the remarkable sequence of events and the unlikely sensations that are described.

The examiner should also eschew the belief that a history or pattern not encountered previously does not exist: unknown is not the same as inconsistent. If the patient's symptoms remain within segmental boundaries, the complaints are consistent and the diagnostic movements are the same at each examination, an organic lesion is very likely. Although the examiner may not be able to make a diagnosis it must be obvious that here is a genuine, even though unfamiliar, disorder.

A serious pitfall in the detection of psychogenic disorders is the bias of the examiner towards the patient.[6] The doctor usually has initial sympathy for the patient who comes for help. However, dispassionate history and examination are essential. Only then is it possible to decide whether or not the patient's symptoms are psychogenic. A great effort is sometimes required to be completely objective but for the patient's sake it is essential. It is even more difficult for a doctor employed by an insurance company to remain unbiased; a detailed clinical approach is vital to establish facts and draw conclusions but is not partisan in a lawsuit (Cyriax:[7] p. 454).

Sometimes nothing can be found during clinical examination. Although the patient has a clear and well-defined complaint, the functional examination remains completely normal. If nothing can be found to account for pain, the decision that the symptom is psychogenic should not be taken lightly. It is possible that the examination has not been sufficiently precise to detect the organic disorder or the lesion is organic but not of orthopaedic origin. After serious internal disorders have been excluded, it is then fair to admit to the patient that one has failed to arrive at a diagnosis.

Clinical examination in psychogenic pain

Diagnosis follows the demonstration of positive inconsistencies during both the history and clinical examination. Sometimes the history contributes to the diagnosis, sometimes the examination will be the criterion but usually it is the overall picture – the combination of history and clinical examination – that is most informative. Inconsistencies may be found between symptoms, between signs and between symptoms and signs.

History

The examiner first listens to the history as related by the patient. Some accounts immediately draw attention to a possible existence of psychogenic pain or at least to a good deal of over-reaction. The patient describes symptoms in a melodramatic way: 'a spear going through my back'; the pain is 'dreadful, torturing, agonizing'. The patient's story is not a clear description of the symptoms but one of intense suffering, increasing disability and of ineffective treatments received.[8]

The examiner then asks precise questions, such as when did the pain start; how did it start; where was the pain first felt; to where did it spread? This technique of questioning is extremely helpful in defining the psychogenic causes. A patient with a genuine lesion may have difficulties in explaining himself, may be garrulous or apathetic, sullen or rambling, and fail to give a coherent account. Or, the invitation to give precise answers to precise questions will produce pleasure that at last a doctor will listen with interest and patience. A consistent report will then almost always be obtained, which quickly suggests the organic nature of the lesion. The response of patients with psychogenic symptoms is in strong contrast: because they do not know exactly what to say and refuse to commit themselves, precise answers are avoided. Pressed to describe the exact position of the symptoms they take refuge in very vague but exaggerated statements such as 'whole leg pain', 'whole leg numbness' and 'the whole leg giving way'. No position makes the pain better, or it comes and goes in the most improbable way. There is a tendency to embark quickly on the degree of suffering and the way the pain has influenced social, family or

sexual life. When brought back to the point, there is reluctance to supply answers, which may even turn to irritation when the examiner continues with precise questions on the exact position of the pain, its variation and its spread.

Sometimes suspicion arises when none of the current and recognizable patterns emerges – the 'inherent likelihoods' (see Ch. 4). The lack of inherent likelihoods should put the examiner on guard. The patient is then allowed to go on talking so that contradiction of earlier statements may emerge.

Inspection

The patient is observed on entering the room and sitting down. Walking, sitting and undressing may demonstrate that certain muscles are not paralysed and establish that a degree of movement exists at the joints of the lower limb. The facial expression should be compared with the degree of alleged suffering. The face of a well-nourished and healthy patient does not correspond with the contention: 'I haven't had a wink of sleep in two months'.

If a limp is present, it should also be studied. The movement must be analysed and compared with the degree of dysfunction found during functional examination.[9] Joints behave in a typical way when diseased and create a characteristic gait. Psychogenic stiffness results in fixation in completely different positions which are, strangely enough, completely opposite: an arthrotic knee causes loss of extension, whereas in psychogenic disorders full extension is present; gross arthritis fixes the hip in full lateral rotation, psychogenic disorders in full medial rotation. In serious psychogenic disorders leading to fixation of joints, the 'wrong' joint is often held fixed: 'acute shoulder pain' with the shoulder girdle elevated and the neck flexed towards the pain; 'lumbar pain' with a gross deviation in the thoracic and cervical area.

Practitioner's checklist

Positive inconsistencies during the history:

- The patient's appearance does not fit with the alleged degree of suffering.
- Symptoms occupy an inconsistent area of skin: pain in the whole leg, spreading from the skull, over the scapula to the buttock and the limb, or affecting one half of the body.
- The patient cannot describe the localization and radiation of pain, or the pain always has different localizations.
- The sequence of symptoms, the variation and the spread of pain or the development of paraesthesia do not fit 'inherent likelihoods'. (Remember that what is inconsistent to the examiner is by no means so to the patient: ridiculous statements can be maintained by the complainer, despite being functionally or anatomically completely impossible).

Functional examination

In practice, functional examination is a better procedure to confirm or reject the diagnosis of psychogenic pain. Sometimes a nervous patient suggests a psychogenic component but the examination reveals a clear and consistent pattern. Conversely a patient who recounts a perfectly plausible history may show a clinical pattern highly suspicious of psychogenic pain.

There may be inappropriate, 'acting' behaviour:[10] the patient twitches or rolls about or rubs the painful area during the examination, in the meantime trying to confirm the degree of suffering by grimaces, sharp intakes of breath, groans and sighs.[11] It should be stressed, however, that acting behaviour is not proof of psychogenic pain. The patient may be so desperate in seeking attention that there is over-reaction. Although the performance may irritate the examiner, it should not alone be sufficient reason to regard the patient as not having an organic lesion.[12] It is not the behaviour of the patient but the existence of inconsistencies that leads to the diagnosis of inorganic pain.

The functional examination is started at a joint as far away as possible from the allegedly painful area: if the shoulder is said to hurt, the wrist and elbow are examined first; in supposed cervical pain, the thoracic spine and lumbar spine are tested first. The patient makes the assumption that, after the time-consuming history, the examiner will immediately start with those movements that usually cause pain and only few will resist the invitation to fake.

During an examination performed by the methods described in this book, a patient who is dissembling makes contradictions. A request is made for simple answers (it hurts; it does not hurt) regarding a large series of movements, which makes it difficult for the patient to work out quickly which movements might be expected to be painful and which not. Random answers are therefore given, forming a pattern that is not consistent with any one lesion. If the whole examination is repeated, the answers then form a completely different pattern. Alternatively the patient may state that every movement is painful. Suspicion also arises when the patient defers an answer or asks for the movement to be done again, so gaining time to formulate a reply. Patients without psychogenic pain say straight away that a particular movement hurts whereas another is painless.

When the physician suspects a psychogenic cause, attempts should be made to uncover more and more inconsistencies, further confirming an inorganic basis. Movements are tested again or in a different way, and movements not relevant to the alleged site of the pain are added to the basic set.

Positive inconsistencies in the functional examination

Fixation of the joint in a position opposite to the capsular pattern

In psychological disorders the hip is fixed in medial rotation, the knee in extension and the sublatar joint in varus.

Movements hurt at an impossible site

Flexion and extension of the knee provoke pain in the hip; pain in the back limits movements of the arm.

Repeat examination

A completely different pattern emerges during repeat examination.

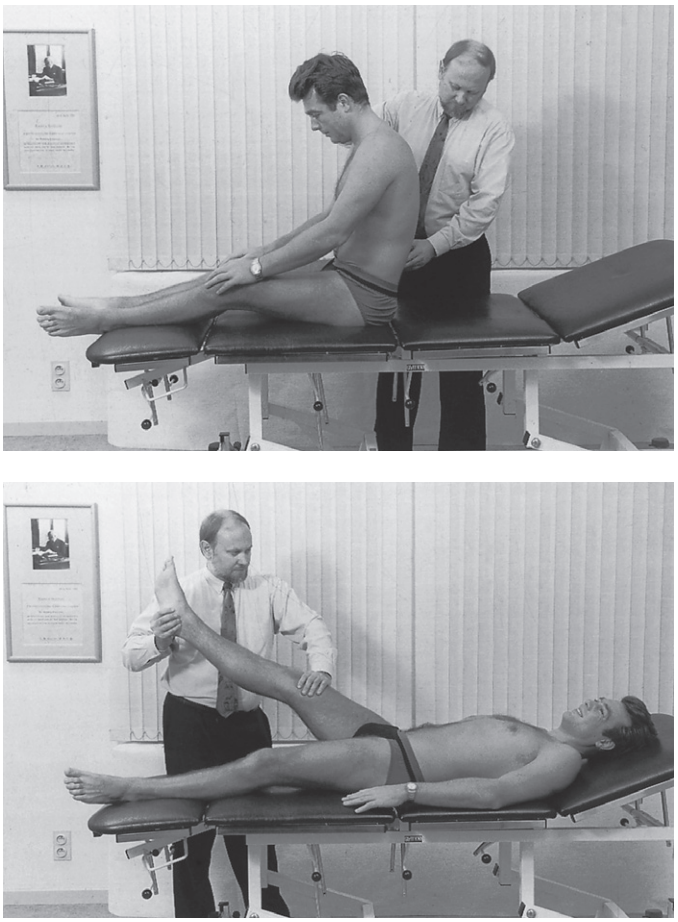

Fig 1 • Limitation of straight leg raising by pain can be demonstrated to be false if the patient can sit up with the legs straight.

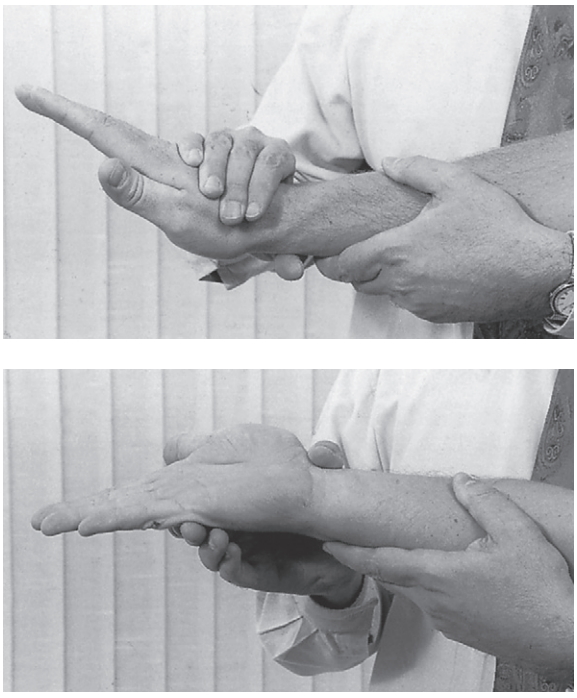

Fig 2 • Pain on resisted extension of the wrist is a false sign if the test repeated with the wrist in supination is negative.

The discrepancy between limitation in one direction and the completely normal movements of its components

Elevation of the arm is impossible but elevation of the shoulder girdle and scapulohumeral abduction are of full range.

Discrepancy between the results of the same movement carried out in different ways

The patient presents with straight leg raising grossly limited by pain but can sit up with the legs out straight (Fig. 1). A painful resisted extension of the wrist may prove to be painless if the test is carried out with the wrist in supination (Fig. 2).

Discrepancy between what the patient can do and the physical signs

A patient who sits normally must be able to flex the hip to 90°. Normal heel-to-toe walking may be observed, but resisted dorsiflexion of the foot is apparently weak.

Detection of alleged weakness

There are several ways to detect alleged weakness:

- *Discrepancy between the bulk of a muscle and weakness during manual testing:* as weakness leads to atrophy, a long-standing dysfunction always results in a decrease in muscle bulk.[13]
- *Weakness in manual testing which is not seen in other activities:* if the patient can move on and off the couch without help, there must be some strength in the flexors of the hip (Fig. 3). Alternatively a weakness may be found to be absent when the same movement is performed in another position: resisted knee flexion is weak with the patient prone but strong in the supine position.
- *'Cogwheel weakness' is found:* the patient, when asked to perform strong isometric contraction, does not fully cooperate and the examiner can feel that the contraction is actively countered by antagonist muscle activity. This results in a sequence of contractions and relaxations, which gives a typical cogwheel sensation.[14]
- *Unwillingness to cooperate can sometimes by demonstrated by simultaneous active antagonist contractions:*[15] the examiner can feel the contraction of an antagonist muscle, for example the triceps, when the agonist muscle, the biceps, is being tested. Dorsiflexion of the foot is weak, but accompanied by visible contractions of the toe flexors (Fig. 4).
- *Hoover's sign to detect an alleged weakness of the leg:*[16] the patient lies supine and the examiner lifts the heel of the affected leg. First the patient is asked to push the weak leg downwards – no pressure is felt (Fig. 5A). Then the patient is asked to lift the good leg, which this time provokes a downwards pressure in the 'affected leg' (Fig. 5B).

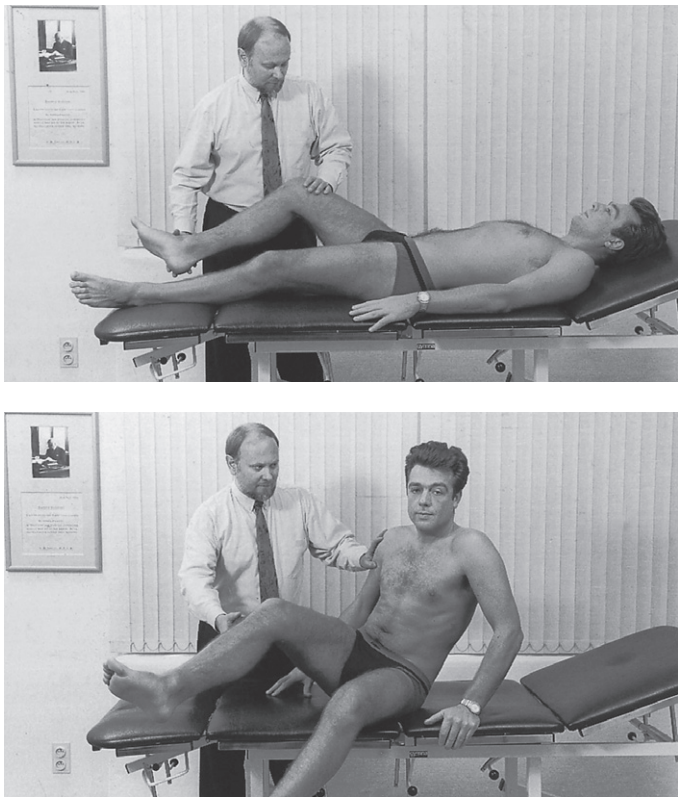

Fig 3 • Weakness on testing the flexors of the hip is not compatible with ability to get off the couch without help.

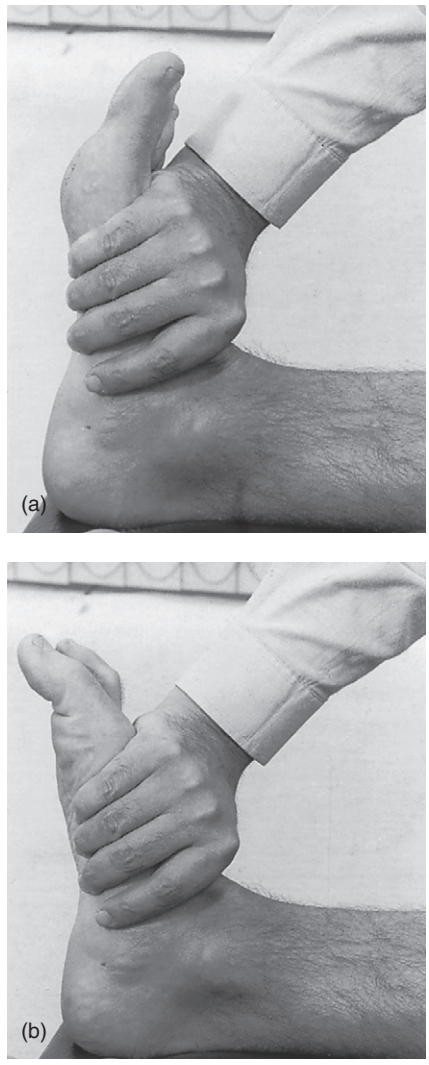

Fig 4 • In a genuine attempt to dorsiflex the foot against resistance the toes are straight (a) but contraction of the flexors is seen when the patient is uncooperative (b).

Practitioner's checklist

Positive inconsistencies in the functional examination:

- Fixation of the joint in a position opposite to the capsular pattern
- Movements hurt at an impossible site
- Repeat examination gives a different pattern
- Discrepancy between limitation in one direction and normal movements of its components
- Discrepancy between results of the same movement carried out in different ways
- Discrepancy between what the patient can do and the physical signs
- Weakness is demonstrated not to be genuine

Diagnosis of psychogenic disorders

The orthopaedic approach to suspected non-physical disorders is pragmatic: two questions need to be answered once clinical assessment is complete:

- Is there a genuine physical basis for the disability or not?
- If the pain is devoid of any organic basis, is it an unconscious (psychogenic) or a conscious process?

The answer to the first question is easy to ascertain, but the second is difficult because there are no clinical orthopaedic methods to make the distinction. If the patient is regarded as 'sincere' and possessing an unconscious belief in the condition, psychogenic pain is diagnosed – the patient is mentally ill. If it is believed that the patient deliberately assumes the symptoms – to deceive, to evade responsibility or to derive gain – the label of 'malingerer' is applied. However, no objective method of differentiation exists and sometimes one label, sometimes another, is used, depending on the examiner's sympathy or the lack of it (Box 1).

The patient who tries to reproduce symptoms or signs of an orthopaedic problem may do so in a number of ways: there may be pretence or perseveration. Pretence is used when the patient fabricates symptoms and signs; perseveration when signs and symptoms, once present, have ceased to exist but are continued by the patient.

Patients who exaggerate their condition are a particular problem: the symptoms and signs are magnified to represent more than they really are. Again the process may be conscious or unconscious. It is, for instance, quite possible that the patient tries so desperately to convince the examiner of a problem that over-emphasis occurs.[17] The symptoms and

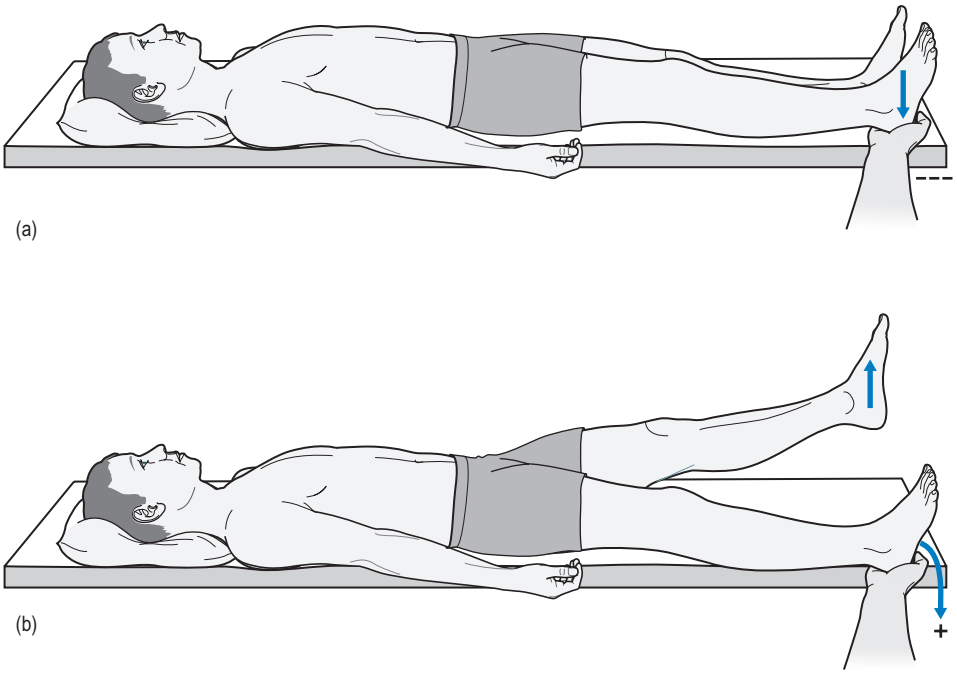

Fig 5 • Hoover's sign: No pressure is felt during active extension (A), but pressure is felt during active elevation of the contralateral side (B).

Box 1

Diagnostic possibilities in apparent psychogenic pain

Organic lesion

Organic lesion with psychogenic overlay

Organic pain in neurotic patients
Exaggeration:
- Conscious (gain)
- Unconscious

Absence of organic lesion

Pure psychogenic pain:
- Neurosis
- Hysteria
- Depression

Malingering:
- Pretence
- Perseveration

physical signs, though largely correct in quality, are excessive in quantity. Alternatively, the patient may have psychological problems but also develops a painful physical condition. In such a case, the pain generates such emotional distress that the consistent clinical pattern is overshadowed by emotional behaviour and excessive excitability. Much time, clinical experience and several repetitions of the examination may then be required to make a proper diagnosis, free from psychogenic overtones.

Treatment of psychogenic disorders

Organic pain with psychogenic overlay

Because a real – though minor – pain is present, the organic lesion should be treated first. Often the relief of the physical lesion, by depriving the patient of the basis of the malady, is curative alone. However, treatment should be adapted to the psychological condition of the patient. It is best to carry out the treatment techniques gently and carefully, in order not to provoke too much in the way of reactions. Only little should be done at once: for example one or two manipulative manœuvres, or 10 instead of 20 minutes of deep friction. The patient should also be warned, preferably in the presence of relatives, of a possible temporary increase in pain after each treatment session.

Absence of organic pain

Active physical treatment should never be given to patients whose pain does not have an organic basis. Not only is it useless but, if the patient's emotional pain gets worse, the treatment will be blamed for this. In contrast, it is very difficult to explain to a patient with psychogenic pain that the complaints are devoid of a physical basis.

The most unfortunate form of explanation is a straightforward declaration that there is nothing wrong and that the sufferer is fit to return to normal activities including work. Such a statement only induces an added determination to

prove by more exaggeration that the disability is physical. Some method must be found to induce a change in attitude without loss of face, in that there is never willingness on the patient's side to admit to him- or herself, or to others that the disease is not organic. Communication of the absence of physical causes must be done with tact, diplomacy and in an understanding and sympathetic manner.[18]

One possibility is to say that an initial minor disorder, for unknown reasons, has triggered such a change in emotional tone that the latter has started to live its own life, although the original source of pain has now long vanished. In spite of this tactic, most patients find the diagnosis difficult to accept. Some are upset, reject the diagnosis and probably degrade the competence of the physician. It is therefore better to state the diagnosis *and the reasons for arriving at it* in the presence of the patient's nearest relatives. It is remarkable how many relatives immediately agree that the point of view is correct. Usually, they have suspected a psychogenic background but their assumption has never been supported by frank and objective medical statements. Once the relatives know the situation, they can start to help the patient in a positive way or at least provide protection from further useless and endless physical treatment or even surgery.

Another tactic for the physician is to declare, after the patient's confidence has been won by a sympathetic and benevolent attitude demonstrated during history and clinical examination, that an attempt must be made to put matters on the road to recovery. The patient is sent to the physiotherapist who applies daily electrical stimulation to 'all the affected muscles' over 2 weeks. The demonstration of normal contraction is then accompanied by praise from the therapist who reassures the patient that the muscles and nerves are normal but that there is a block to transmission of the message. The treatment, it is then suggested, will be addressed to releasing this block. Thereafter, the patient practises the hitherto impossible or painful movements. The role of the physiotherapist is essential: to be encouraging and sympathetic and try to establish a good relationship. The expression 'psychogenic pain' should never be used; the lesion from which the patient is suffering is a 'functional block'. Patients usually accept the diagnosis and such supportive treatment, with positive enforcement, is often highly successful. In a series of 107 patients regarded as suffering from purely psychogenic symptoms (therefore compensation cases were excluded) 76 declared themselves well and returned to work at the end of 3 weeks' supportive electrical treatment (Cyriax:[7] p. 460).

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