

# Psychogenic pain: an imaginary concept

by Jon Garvey

**Pain is almost never imagined. When the cause of a patient's complaint is not immediately discernible, it is worthwhile to remember that certain mental states affect the perception of pain, and vice versa; if these are considered, the GP should be able to demonstrate the organic cause of the pain in most cases.**

**H**OW many times have you received the following letter from a hospital consultant?

"Dear Doctor... The EGG, blood tests, CT scan, and angiography were completely normal. Mr Gripes still complains of his pains and seemed rather tense and anxious in the clinic today. I doubt that we shall find an organic cause, and I have reassured him and told him to forget about the pain."

Some months later, when you see Mr Gripes about something else, he admits when asked that his pains are as bad as ever, but that he has not sought help since the doctors all tell him that they are imaginary.

The concept of psychogenic pain is one of the most useless and misleading ideas in medicine, and one into which we lapse comfortably when our limited powers of diagnosis, taught to us by the same consultants who label a pain as imaginary when their unnecessary and complex tests fail to find a disintegrating organ, are overtaxed. Academic GPs fall into it when they fail to find one of the diseases they were taught about at medical school, and so do those Balint-minded types who, realizing how many of the pains seen in general practice do not fit into these categories, start to ask sagely what the patient is trying to tell them by his pain.

In my experience, the patient is usually trying to tell us that it hurts, and if one takes the trouble to find the aetiology of the pain and the factors affecting it, one can often improve his mental state immeasurably.

When considering diagnosing a pain as being of psychological origin, it is worth remembering from elementary psychiatry that there are only two conditions that produce nonorganic pain: hysterical conversion and malingering.



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Hysterical conversion is a well circumscribed condition, and despite frequent bandying about of the term in casualty departments, is uncommon. It is not usually hard to diagnose, since the signs relating to the pain are typically not just different from what we might expect, but also impossible. Tenderness moves at each examination, paralysed legs refuse to waste, and so on. How the pain arises in these cases is not well understood, but in all cases there is a pretty obvious payoff from the pains; life would be considerably harder for the patient if they got better.

Malingering is also not that common, and is easy enough to spot. There may be elements of both these mechanisms in a few of the patients we have with Thick Notes Disease and personality disorders, such as Munchausen's syndrome.

However, apart from these two very limited categories, it is reasonable to remind ourselves, whenever we are short of an explanation for a symptom, that *all pain is in the mind, but no pain is imaginary.*

## Case history

An overweight 54-year-old woman started to complain of severe upper abdominal pain, usually at 2 a.m., which necessitated night calls two or three times a week. Narcotic analgesics were given by both mouth and injection by various partners, and apart from making her sleepy and disorientated they made the pain worse. On each occasion, careful examination revealed only intercostal muscle tenderness. The only drug that helped at all was diazepam IM (once!).

All investigations for gallbladder disease, peptic ulceration, cardiac pain, and so on, were negative, and the pain became more severe and more confusing, in that there seemed to be a clear relationship to both food and the premenstrual period. Baffled, the doctor spent a quiet evening poring over the past notes, and eventually constructed an elegant psychological origin for the pain in the patient's undoubted guilt about being unable to lose weight. Meanwhile, however, another partner had to admit her to hospital as an emergency where, eventually, mild pancreatitis was discovered. From that day she had no more than mild abdominal pain, and she has remained relatively well ever since.

What then was the sequence of events in this case? It would appear that the patient developed a mild, but entirely organic abdominal pain, which not unnaturally made her anxious. This anxiety provoked a hyperventilation response (see below) so that by the time the doctor arrived two or three hours later, only symptoms attributable to this (exquisite intercostal and subcostal tenderness) were left. Narcotics failed to work because their disorientating properties increased the patient's anxiety and hence her hyperventilation. Diazepam worked once because of its nonspecific effect on arousal and hence respiration. Uncovering a mild organic cause largely cured the pain by removing the cause of anxiety and the feeling that the doctors believed she was imagining her pain (which we did). Thus we can see that mental state both profoundly affected the perception of pain and led to physical responses that exacerbated it (or, strictly, led to an entirely new pain).

At this point, in order to clarify how to deal with "undiagnosable" pains, it may be useful, although rather arbitrary, to suggest two categories: those mental states that affect pain, and those pains that affect mental state.

### **Mental states that affect pain**

**Depression:** Pain in depression is *not* psychogenic. Depression depresses the pain threshold, so that the patient complains bitterly of aches and pains that would be noticed hardly, if at all, in health. But the backache is real backache and the abdominal pain is real colic (or constipation, or both). Whether one chooses to treat the pain or just the depression is a matter of clinical judgment, but one should be aware of the mechanisms of both, and their interaction. Depression may also be masked by a presenting symptom, on which the patient

blames his ill health. The good doctor spots the underlying depression but is not fooled into thinking that the trivial physical complaint is, despite its exaggerated importance, imaginary.

**Anxiety:** The true psychosomatic conditions fit here. A chronically aroused state can beyond a doubt contribute to coronary artery disease (type A personality, and so on), peptic ulceration and other hyperacidic conditions, and possibly other diseases. However, psychotherapy is not the treatment for myocardial infarction—these conditions are organic. The role of stress is interesting, and possibly of preventive importance, but is only the indirect cause of pain. The role of personality and anxiety in the "functional" syndromes discussed below is less clear—it is usually more productive to treat the physical cause of pain than to try to change a personality.

### **Pains that affect mental state**

Any pain can affect mental state, but those that do so most are those that the doctor cannot diagnose, or passes off as "all in the mind". Below are some of the most commonly missed and mistreated syndromes, with some suggestions on management.

**Hyperventilation syndrome:** I put this first, since it is undoubtedly the commonest cause of doctor bafflement, patient anxiety, and wasted investigation. I am extremely grateful to Dr L. C. Lum for his excellent article (1983) which has revolutionized my appreciation of this ubiquitous condition. Most doctors are aware of the syndrome of "hysterical" hyperventilation (a sloppy and misleading term since it is not especially common in hysterics), in which an anxious patient in casualty gets chest pain, acroparaesthesiae and perhaps carpopedal spasm. The emergency use of rebreathing via a brown paper bag is well known but under-used because of our fixation with giving drugs. What is hardly appreciated is the extent to which these acute states are the product of any underlying disorder of breathing with chronic consequences and a wide range of symptoms, including chest or upper abdominal pain, neck pains and tension headache, light-headedness or even fainting, globus hystericus (another nonsensical term), palpitations typically described as "fluttering" in the *upper* chest and therefore often distinguishable in the history from true palpitations, and breathlessness, again easily distinguished from true dyspnoea

by the deep breaths and sighs the patient describes or sometimes even demonstrates.

If you have patients with these symptoms, observe them at their next surgery visit, and you will probably notice occasional deep sighs, a high respiratory rate, and a tendency for the breathing to be intercostal rather than diaphragmatic. Many of these patients present late with anxiety, illness-phobia, agoraphobia, or depression. One may often find that the trigger was some stress or worry, but a little careful history taking will show, for example, that the depression is caused by the persistent symptoms and not vice versa. Explanation of the positive cause of the symptoms is of great help, as is the dramatic demonstration that one can reproduce many of the symptoms by getting the patient to overbreathe in the surgery.

Long-term treatment is more difficult. Lum (1983) reports a high success rate from breathing and relaxation exercises over a period of months, but he has a hospital physiotherapy department to help him. So far, I have encountered more difficulty in transferring this to general practice, but this does not alter the validity of the diagnosis. Some people say that food allergy results in hyperventilation, but my own limited experience has not confirmed this.

### **Mechanical spinal derangements:**

Minor problems (there is no adequately precise clinical term) in the cervical and thoracic spine particularly, but sometimes the lumbar spine as well, can give rise to persistent symptoms in or near the spine (and incidentally lead to totally superfluous X-rays that usually reveal irrelevancies such as disc narrowing or arthritis). However, they also commonly produce more distal pains, such as tension headaches, various patterns of "neuralgic" pain, brachial or upper trunk pains, pains mimicking sinusitis, and chest pains suggesting cardiac pain or even renal colic (I have seen many patients previously given unnecessary ECGs and intravenous pyelograms for these reasons).

These symptoms are best treated by spinal manipulation, or if this is contraindicated or difficult, by steroid-local anaesthetic injections into the affected zygapophyseal joint, traction, or even such relative innovations as transcutaneous nerve stimulation or acupuncture. Psychotherapy does not work. If the doctor is not able to use any of these techniques, he has only the system of medical training to blame.

**Malocclusion:** Atypical facial pain is of uncertain aetiology and may often be quite successfully controlled with antidepressants. However, it does not follow that the pain is psychogenic. In at least two cases I have suspected malocclusion despite the denials of the patients' dentists, and referral to hospital oral surgeons and correction of the dental problem cured the symptoms.

**Irritable bowel syndrome:** Some evidence suggests that certain types of personality are prone to develop this condition. However, this discovery is not much use to the patient. As in many of these conditions, anxiety (both acute and constitutional) has a bearing on the condition but the doctor should not forget that the *pain* comes from the bowels (and can be reproduced if the patient allows researchers to insert and inflate balloons in his colon—truly a sign of madness). The accepted treatments for the condition (bulking agents, antispasmodics, and minor tranquillizers) are well known – my main point here is that it is not a psychogenic pain. The role of food intolerance is uncertain, but it is important in some cases.

**Food allergy:** This, as a glut of recent literature has said, is commoner than is classically taught, but more often causes symptoms other than pain. However, headache, chest pain, and epigastric and abdominal pain have all been attributed to food intolerance, and in my experience it is a factor in over 50 per cent of migraine sufferers. Until such time as reliable screening tests become available, the only method of investigation is exclusion dieting. This is quite possible to perform in general practice for a period of five to seven days, which is long enough for a majority of reactions, but it is only fair for the doctor to point out to the patient that his culinary sacrifices are not guaranteed to produce a cure!

**Undiagnosed nasty:** I include this category simply to remind us all of those patients whose headaches really *were* caused by brain tumours. If a symptom persists without a diagnosis, the possibility must be considered that the tests were wrong, or the tablets were wrong, or the psychiatrist was wrong.

In summary, then, truly psychogenic pain is rare, and poor diagnosis of physical conditions common.

#### REFERENCE

Lum, L. C. (1983) *Update*, 27, 912.