perceived as being of lower priority. The sharp rise in the incidence of manmade or technological disasters in Britain in recent years has also increased the prevalence and visibility of psychological conditions related to trauma.

When disaster strikes now it seems doubly affronting. Not only is the West's superior technology supposed to protect us from the "natural" disasters that afflict developing countries but technology itself often fails and makes for disaster. We wrongly assume that our wealth and sophistication will guarantee our safety, thus increasing our adherence to magical notions of inviolability. So when we get hurt—and some of us always will—it comes as an immense shock and is very painful.

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Medically unexplained physical symptoms

Do not overinvestigate

Physical symptoms that lack an obvious organic basis are common in medical practice.[1-7] Many complaints of abdominal pain, dyspepsia, headache, backache, joint pain, chest pain, palpitations, and fatigue fall into this category, which so far lacks a satisfactory descriptive term. Those that have been used—somatisation, hypochondriacal symptoms, functional somatic symptoms, and functional overlay—all have pejorative overtones.

Most patients with these complaints are managed by excluding physical causes and prescribing symptomatic treatment. Most "unexplained" physical symptoms are transient, and their management is straightforward.[8,9] Unfortunately, some patients continue to suffer prolonged symptoms and disability despite negative results of medical investigation and reassurance. These "diagnostic puzzles" are difficult to treat and consume considerable medical resources to little benefit. Frequently, the patients turn to expensive and usually unsuccessful alternative medicine. Although most such patients have single symptoms, a conspicuous few have multiple complaints—the demanding "hypochondriacal" patients, who attend many doctors over long periods.

Follow up studies have repeatedly shown that if an initial assessment does not suggest a serious underlying physical cause then eventually uncovering one is extremely unlikely.[8,9] Doctors are rightly concerned not to miss occult physical causes, but overinvestigation[10] and excessive and inappropriate use of symptomatic treatment are common. Not only is such an approach expensive but it also delays the right treatment and often reinforces patients' anxieties and erroneous beliefs.

When physical causes are found for symptoms they are usually trivial—for example, oesophagitis and chest wall syndromes as causes of chest pain. Some symptoms may be due to the autonomic consequences of anxiety or to overawareness of normal bodily sensations (for example, abnormal sensitivity to tachycardia, tiredness, or the effects of caffeine or alcohol).

Psychiatric causes may be important in some cases. In general practice one fifth of all attenders present with physical symptoms of minor emotional disorder.[11] Other patients may suffer from anxiety, panic disorders, or depression. Less common are "somatoform disorders." These are defined as physical symptoms without an obvious pathological explanation, or prominent psychological symptoms, that are resistant to medical reassurance. Subcategories include hysteria, hypochondriasis, psychogenic pain, and somatisation disorder (multiple chronic physical problems).

Although a few unexplained symptoms eventually receive specific physical or psychiatric diagnoses, pursuing single, specific explanations is usually unproductive. In the past a preoccupation with traditional psychiatric diagnostic categories may have hindered understanding. Many patients do not have a psychiatric disorder, although psychological factors (such as erroneous beliefs and anxiety) may affect their interpretation of minor physiological sensations. A multicausal aetiology is most likely, with physical and psychological factors interacting. Although Paul Wood suggested this as the explanation for Da Costa's (effort) syndrome 50 years ago,[12] his model has been largely ignored.

Personality, previous experience of illness, life stresses, attitudes to medical care, expectations, and behaviour are all factors that predispose to greater awareness and even misinterpretation, of minor physical perceptions. That a patient with a family history of ischaemic heart disease may become worried about medically trivial chest pain, especially at times of overwork or stress, is readily understandable. What is important and often unrecognised is the proportion of patients with non-specific functional symptoms complicating major physical illness. Common examples include atypical chest pain after myocardial infarction or coronary artery surgery,[13] the post-concussional syndrome after head injury, and many chronic pain syndromes.

Once established, symptoms and distress may be maintained and reinforced by many factors, including secondary anxiety, the attitudes of others, and medical advice that seems ambiguous or contradictory. Thus patients often complain of

feeling frustrated at being told that results of investigations are negative but not receiving any convincing explanation of persistent distressing symptoms. Continuing unproductive investigation, multiple referral, and unnecessary drugs are all causes of further uncertainty.

Management should aim at avoiding the problems arising from prolonged and unproductive investigation followed by abrupt suggestions of a psychological explanation to a sceptical patient. Doctors should adopt a dual approach, whereby investigation is accompanied by the recognition and management of psychological factors. Patients should believe that, whatever the cause of their problem, their complaints and worries are being taken seriously.

All appropriate investigations should be undertaken at the outset, and further investigations should be done whenever specific clear indications arise. Psychological factors should be considered from the beginning and discussed in a way that is acceptable and convincing. Advice and information must take account of the patient's particular worries and beliefs.

Most patients with non-specific physical symptoms are satisfied by simple explanation, discussion, and reassurance. Much more difficult are patients whose symptoms persist despite this. Some remain convinced that their continuing symptoms must have a sinister cause; for them repeated reassurance is ineffective and may well exacerbate their problems and their demands on doctors.[14] Further detailed explanation, discussion, and simple behavioural advice (including advice on managing anxiety) in general practice or the outpatient clinic is often effective, but some patients require more specialist help. Unfortunately many psychiatrists have little experience of treating patients who present with somatic symptoms. They may need educating about the role and effectiveness of modern treatments and of the harm caused by their all too common response, once referral has eventually been achieved, of writing a letter concluding that "no psychiatric disorder is present."

Several well established psychiatric and psychological treatments may be useful.[9] Antidepressant drugs are effective in treating symptoms associated with a major depressive illness. They also have a wider role in pain syndromes, such as atypical facial pain.[15] Newer psychological treatments for anxiety disorders have an important role.[16] "Cognitive-behavioural" treatments aim at understanding and changing patients' erroneous beliefs about their symptoms and their causes. This cognitive component is combined with behavioural methods—such as techniques for managing anxiety (relaxation, distraction, and breathing exercises) and diary keeping—and a graded increase in activities. Clinical experience and research have shown that such methods are acceptable and are often effective when simple explanation has failed.[9,17]

The small group of patients who repeatedly present with chronic and multiple symptoms pose great problems for doctors,[8,9] as do patients attending pain clinics.[18] It is too late for prevention, and therapeutic aims may need to be modest—damage limitation rather than cure. A single doctor should take responsibility for consistent care for the patient and family, offering regularly scheduled appointments and limiting and controlling any other medical care.

Systematic management of persistent unexplained physical symptoms has been neglected. The numbers of patients and the extent and severity of their disability and of their demands on all forms of medical resources indicate the need for clearer and more effective clinical policies so that we can provide extra help to those who need it. Earlier this year the Royal College of Physicians and the Royal College of Psychiatrists held a successful joint meeting reviewing the aetiology and the management of the condition. It agreed the need for much greater collaboration in developing effective treatments, improving services, and in promoting changes in training. Research is urgently needed to develop and evaluate treatments and training. Clearly much could be achieved by simple and effective early treatment by general practitioners and physicians, but we also need greater specialist resources. Improved early care should be highly cost effective, saving much unnecessary investigation and ineffective and unsatisfying consultation.

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Testing for hepatitis C virus

Panels of antigens and antibodies are most practical

Blood banks in the United Kingdom began the routine testing of blood donors for antibodies to components of the hepatitis C virus this month. Doctors who want to make a firm diagnosis of hepatitis C virus infection, however, still lack a single laboratory test that is entirely satisfactory.

An assay to detect an antibody related to hepatitis C virus (C100-3 antibody) was published simultaneously with the cloning of a complementary DNA representing part of the viral genome.[1,2] C100-3 antibody recognises a composite polyprotein antigen (C100-3) within non-structural regions of the virus[2,3] and is a consistent marker of chronic parenteral non-A non-B infection.[3] In acute infections, however, this antibody is unreliable because of the delay (median 22 weeks) in seroconversion after exposure.[1]