CASE REPORT Somatization disorder and cancer: A case history and review

TABITHA THOMAS, B.A., M.B., B.S.,¹ SARA BOOTH, M.B., B.S., F.F.A.R.C.S.I.,²

HELENA EARL, M.B., B.S., PH.D., F.R.C.P.,² AND GRAHAM LENNOX, B.A., B.M., B.CH., F.R.C.P.²

¹Arthur Rank Hospice, Cambridge, UK

²Addenbrookes Hospital, Cambridge, UK

(Received September 1, 2004; Accepted December 4, 2004)

ABSTRACT

Cancer pain generally has a physical cause exacerbated to varying degrees by psychological, social, and spiritual factors. This article describes the case history of a cancer patient with severe pain for which no physical cause could be found, who was subsequently found to have a history of somatization disorder. There follows a review of the literature, with specific reference to the difficulties of managing somatization in the context of cancer.

KEYWORDS: Health behavior, Pain, Pallliative care, Psychology, Somatization disorder

INTRODUCTION

The concept of "total pain," that is, pain which is not only physical but also has psychological, social, and spiritual domains, is widely used in palliative medicine. Because palliative care patients usually have advanced disease, pain is taken seriously, treated early with strong analgesics, and is assumed to have a physical basis, while being accentuated by psychological, spiritual, and social factors.

This case highlights the caution required with this approach when patients are seen at earlier stages of their disease. It also raises questions about how to manage somatization disorders in the context of cancer.

CASE HISTORY

Mr. J is a 55-year-old gentleman who was admitted under the oncologists with severe back pain. He had a history of a rare sarcoma of his perineum that had been surgically excised at his local hospital, followed by a 6-month course of radiotherapy and chemotherapy at the regional cancer center. The most recent scan, 2 months previously, had confirmed he was currently in remission. The back pain had developed insidiously over the previous 2 months, but on admission was so severe Mr. J was unable to lie flat. He described the pain as "like blowing cold air over a toothache." On examination, his back was tender but there was no neurological deficit.

He had a significant past medical and social history: It was thought that the epithelioid sarcoma had arisen as a consequence of his exposure to Agent Orange in the Vietnam War and his oncologists were supporting him in a disability claim from the Veterans Affairs Administration. So far his claim had been unsuccessful. He had moved to the United Kingdom after the war and had subsequently retired from work on the grounds of ill health, reportedly owing to his ischemic heart disease and the disability incurred from four strokes (the first at the age of 40). Consequently he took a large number of drugs for his cardiovascular and cerebrovascular disease, and had also been on large doses of morphine for his back pain.

The pain was so severe there was a concern that the sarcoma had recurred in his spine. He had found opioids ineffective, despite escalating the dose of MST to 400 mg bd, so he suddenly stopped taking it, apparently suffering no withdrawal symptoms. As it was a complex and severe pain that was apparently unresponsive to opioids, he was referred to the hospital palliative care team. Our initial

Corresponding author: Tabitha Thomas, 42 Suez Road, Cambridge, CB1 3QB, UK. E-mail:tsthomas@doctors.org.uk

management involved a ketamine infusion, benzodiazepine sedation, an urgent MRI, and referral for an epidural. The ketamine and sedation reduced his pain dramatically over 24 h and following the epidural he was well enough to be discharged.

Because Mr. J lived some distance away, we referred him to his local hospice for further management should his pain return. One week later it did. He was given further courses of ketamine, benzodiazepines, and opioids on a number of occasions when the pain returned, with immediate effect. However, MRI did not reveal an obvious cause for the pain.

Further investigations were instigated when he complained of numbness of his perineum, impotence, incontinence of urine and feces, and was found to have saddle anesthesia to pin prick on examination. Because of suspected cauda equina syndrome he was commenced on high dose steroids. An urgent MRI was performed but was normal, as was the subsequent examination of his CSF. He was reviewed by a neurologist, who found his residual signs not only to be incompatible with cauda equina syndrome, but also incompatible with the previous four strokes Mr. J claimed to have suffered.

Because he had presented with a variety of symptoms for which we could find no obvious cause and had inconsistent clinical signs, we suspected that he might have a somatization disorder. We therefore requested his medical notes from his local hospital, searched his records in detail, and discovered that he had a past history of medically unexplained symptoms. Although he had been admitted to the hospital on numerous occasions over the previous 15 years, with either transient neurological symptoms or chest pain, extensive investigations had all been normal. With this history and our inability to find a physical basis for his recurring pain and neurological symptoms, it seemed likely that these were similar "medically unexplained symptoms."

Further management required careful consideration. A fine balance had to be struck between further overinvestigation and treatment, leading to possible iatrogenic harm, and the prompt diagnosis of recurrent disease. It required excellent communication between the physicians involved, local psychological and family support, and a means of conveying our findings that would not alienate him and ideally would reassure him. Details of this were put to him and his family doctor in a letter and he subsequently agreed to see a psychiatrist with an interest in psychotherapy.

He is currently disease free, takes only acetaminophen for pain, is functioning well at home and is hoping to return to the United States to see his family. Interestingly his claim for disability benefits has now been successful.

DISCUSSION

Given his previous history of multiple medically unexplained symptoms, it is probable that Mr. J had a somatization disorder. Although precise diagnostic criteria vary between the World Health Organization (ICD-10) and American Psychiatric Association (DSM-IV), somatization disorder can loosely be defined as at least 2 years of multiple and various medically unexplained symptoms and persistent refusal to accept advice and reassurance from doctors, accompanied with impaired functioning (Page, 2003).

To somatize, that is, to present with medical symptoms when the underlying problem is really psychological, is relatively common in primary care (Craig et al., 1994). Many depressed patients present with fatigue or pain for which no biomedical cause can be found. Most of these patients will accept a psychological explanation for their symptoms and are therefore known as "facultative somatizers" (Bhui & Hotopf, 1997). A minority of patients however will continue to attribute their symptoms to a physical cause, and are known as "true somatizers" or "chronic somatizers." This group of patients is much more likely to be referred on to secondary care for further investigation. One study has found that 30% of new referrals to general medical outpatient clinic had medically unexplained symptoms (van Hemert, 1993). The greater the number of reported symptoms, the more disabled the patient is likely to be (Katon et al., 1991), and the more at risk they are from having multiple investigations, invasive procedures, and surgical operations (Bhui & Hotopf, 1997).

SOMATIZATION IN CANCER

Most cancer patients are willing to accept that their anger or distress can exacerbate their symptoms. However, for those with active disease, the basis of those symptoms is usually physical, and to say that a symptom has no organic basis in a patient with a history of cancer requires considerable clinical expertise and experience.

New symptoms, particularly pain, are naturally of great concern to cancer patients: Many interpret an increase in pain as a sign that their disease is progressing (Ahles et al., 1983). When compared to chronic pain patients with similar pain scores, patients with cancer have significantly higher levels of cognitive and behavioral fear responses to pain, and they think and worry more about it (Turk et al., 1998).

Because of the potential significance of new symptoms in cancer patients and the heightened levels of anxiety and distress, it is possible that the prevalence of somatization among this group is high. It is known that the fear of cancer in healthy people is a predictor of a tendency to misinterpret common benign symptoms as sinister ones (Berman & Wandersman, 1991), however the prevalence of persistent medically unexplained symptoms in cancer patients has not been reported. Nor is it known whether preexisting psychosocial factors can predict which patients are more likely to somatize with cancer. Dalton and Feuerstein (1988) reviewed the scant literature on the subject and concluded that personality played an inconsistent role in the modulation of cancer pain. In a more recent review, Zaza and Baine (2002) found a possible association between "catastrophizing" and high pain scores, which suggests that preexisting cognitive styles can affect the pain response. However the small numbers involved in the studies make the significance of such results inconclusive. Syrjala and Chapko (1995) found that biopsychosocial factors are at best a modest predictor of pain intensity in bone marrow transplant patients. Although these studies suggest that psychosocial factors can influence symptom intensity, they do not identify cases of true somatization, where subjective symptoms have no physical basis.

Is it useful to know whether personality type or psychosocial factors can predict illness behavior in cancer patients? Knowledge about a patient's previous tendency to somatize could lead to dangerous delays in diagnosis and undertreatment of symptoms. On the other hand, information that a patient tends to express his emotions or distress via physical symptoms would allow psychological issues to be addressed earlier. Prior knowledge of Mr. J's tendency to somatize would have prompted us to investigate his illness beliefs and psychological state in more depth at presentation and perhaps be more cautious with our use of drugs. Given the risk of toxicity of both opioids and ketamine in the absence of pain, it was fortunate he suffered no serious side effects. Therefore knowledge of his previous history would allow a safer and more sensitive approach to his pain management while we awaited the results of investigations.

CHARACTERISTICS OF PATIENTS WHO SOMATIZE

Just as we are unable to predict which cancer patients are more likely to somatize, it is still un-

somatization and previous severe physical illness in childhood coupled with parental neglect has been described. It is thought that childhood illness leads to improved parental attention and thus the sick role provides a secondary gain (Craig et al., 1993). It is possible that this pattern of illness behavior then continues into adult life and becomes a personality trait. Indeed there is a high association of somatization disorder with personality disorder: Stern et al. (1993) found 72% of those with somatization disorder also had a personality disorder, compared to 36% of the psychiatric control group.

In another study of patients in primary care, those who presented with "acute somatization" were more likely to have experienced a severely threatening life event in the preceding 9 months than patients with a physical illness or healthy controls. In addition, life events that had "high secondary gain potential" were more likely to lead to somatization. Such life events were typically characterized by experiences of rejection, personal failures that were liable to attract criticism, and situations involving undesirable commitments or obligations. Patients who were aware of the stress brought on by such life events (psychologizers) tended to take positive action to rectify the situation. Somatizers, however, were far less likely to adopt such "neutralizing" coping strategies (Craig et al., 1994).

THE DOCTOR-PATIENT RELATIONSHIP

Patients who somatize often engender frustration among the medical profession and gain labels such as difficult, functional, supratentorial, heartsink, hysterical, or even malingerers. Doctors respond negatively to patients whose symptoms cannot be explained organically: For example, doctors tend to lower their estimation of the severity of pain if they know that there is no physical cause (Tait & Chibnall, 1997). Weissman and Haddox (1989) have found that physicians undermedicate cancer patients whom they viewed negatively. Consequently, such patients can experience a medical assessment as hostile and adversarial (Reid et al., 1991). If investigations are negative, they feel doctors deny the reality of their symptoms (Salmon et al., 1999), which results in conflict between patient and doctor.

Although doctors may feel certain there is nothing physically wrong, there is often a reluctance among physicians to diagnose somatization (Bhui & Hotopf, 1997). Such a diagnosis is all the more difficult because true somatizing patients will often strongly refute the suggestion that there is a psychological aspect to their symptoms and are particularly hostile to referrals to psychiatrists (Creed & Guthrie, 1993). As a result the patient gets sent for ever more medical referrals and tests, which only adds to their belief that something serious is amiss.

HOW MUCH TO INVESTIGATE?

This is especially difficult in the cancer patient. Even if clinical signs are minimal, the investigation may be performed for reassurance of both patient and physician. However, a negative test result may not be reassuring to a patient who somatizes: His symptoms continue to trouble him and he therefore worries that something has been missed. Patients with substantial psychiatric symptoms are more difficult to reassure, as are those with a hypochondriacal syndrome (Appleby, 1987). Long-term personal beliefs or past events can also be an impediment to reassurance: for example, lay beliefs about cancer or memories of a relative with cancer. Such beliefs can be difficult to elicit during a routine consultation (McDonald et al., 1996).

Furthermore, investigations can reinforce the belief in a physical problem (Bhui & Hotopf, 1997), may reveal minor abnormalities that then become hypothesis generating (Page, 2003), and may cause iatrogenic harm.

Therefore if the results of an investigation are normal, it is important to be clear about what the subsequent management plan will be.

MANAGEMENT OF THE PATIENT WHO SOMATIZES

Once a physical cause has been excluded, the manner in which the symptoms are explained to the patient is crucial. If the patient is a true somatizer, it is important to deal with them in a way so as not to damage their self-esteem by using inappropriate psychological explanations (Creed & Guthrie, 1993). Explanations that attribute symptoms in a way that removes any sense of blame and empower patients to be involved in managing their illness are the most successful (Salmon et al., 1999).

It is important to listen to the patient's story and never to deny the existence of his or her symptoms and, because personal beliefs about the symptoms may impede reassurance, it is important to determine what the patient thinks is wrong (McDonald et al., 1996).

Patients who somatize tend to be known by multiple health professionals and this leads to duplication of investigations and multiple diagnoses. It is therefore important to have a single clinician responsible for all aspects of their care, and if unsure of the diagnosis, it is best not to give one (Bhui & Hotopf, 1997).

Referral to liaison psychiatry can be helpful to exclude associated psychiatric diagnoses such as anxiety and depression and for help with management. The way in which the psychiatrist is introduced is important, as true somatizers can be hostile to such a referral. It can be helpful to introduce the psychiatrist as part of the team or as someone with an expertise in controlling pain. A joint consultation with physician and psychiatrist is ideal (Creed & Guthrie, 1993).

Mr. J's case emphasizes the difficulty of managing somatization in the context of cancer. In retrospect a number of clues could have led us to the diagnosis earlier. There was a pattern of an escalation in symptoms following each investigation and initial dramatic response to treatment. He required repeated reassurance, even when his MRI was negative, but despite this, his affect was always jovial and in the circumstances incongruous. Ultimately, a large number of physicians were involved, including two palliative care teams, neurologists, anesthetists, and oncologists. We encountered many of the difficulties of managing a patient who somatizes, and, fortunately, despite powerful drugs and multiple investigations, no physical harm was done. Because of the high likelihood of recurrence of his sarcoma, future management of symptoms will always necessitate careful physical examination and investigation. However, knowledge of his previous illness behavior will make it easier for us to devise a strategy to avoid the difficulties described earlier and to address his psychological needs more directly.

REFERENCES

- Ahles, T.A., Blanchard, E.B., & Ruckdeschel, J.C. (1983). The multidimensional nature of cancer related pain. *Pain*, 17, 277–288.
- Appleby, L. (1987). Hypochondriasis: An acceptable diagnosis? British Medical Journal, 294, 857.
- Berman, S., Wandersman, A. (1991). Measuring knowledge of cancer. Social Science Medicine, 32, 1245– 1255.
- Bhui, K. & Hotopf, M. (1997). Somatization disorder. British Journal of Hospital Medicine, 58, 145–149.
- Craig, T., Drake, H., Mills, K., et al. (1994). The south London somatisation study II. Influence of stressful life events and secondary gain. *British Journal of Psychiatry*, 165, 248–258.
- Craig, T., Boardman, A., Mills, K., et al. (1993). The South London Somatization Study. I: Longitudinal course and the influence of early life experiences. *British Journal of Psychiatry*, 163, 579–588.
- Creed, F. & Guthrie, E. (1993). Techniques for interviewing the somatising patient. British Journal of Psychiatry, 162, 467–471.

- Dalton, J. & Feuerstein, M. (1988). Biobehavioural factors in cancer pain. Pain, 33, 137–147.
- Katon, W., Lin, E., Korff, M., et al. (1991). Somatization: A spectrum of severity. American Journal of Psychiatry, 148, 34–40.
- Mcdonald, I., Daly, J., Jelinek, V., et al. (1996). Opening Pandora's box: The unpredictability of reassurance by a normal test result. *British Medical Journal*, 313, 329-332.
- Page, L. (2003). Medically unexplained symptoms: Exacerbating factors in the doctor-patient encounter. *Journal of the Royal Society of Medicine*, 96, 223–227.
- Reid, J., Ewan, C., & Lowy, E. (1991). Pilgrimage of pain: The illness experiences of women with repetition strain injury and the search for credibility. *Social Science* and Medicine, 32, 601–612.
- Salmon, P., Peters, S., & Stanley, I. (1999). Patients' perceptions of medical explanations for somatisation disorders: Qualitative analysis. *British Medical Jour*nal, 318, 372–376.
- Stern, J., Murphy, M., & Bass, C. (1993). Personality disorders in patients with somatization disorder. A

controlled study. British Journal of Psychiatry, 163, 785-789.

- Syrjala, K. & Chapko, M. (1995). Evidence for a biopsychosocial model of cancer treatment related pain. *Pain*, 61, 69–79.
- Tait, R. & Chibnall, J. (1997). Physician judgements of chronic pain patients. Social Science Medicine, 45, 1199-1205.
- Turk, D., Sist, T., Okifuji, A., et al. (1998). Adaptation to inelastic cancer pain, regional/local cancer pain and non-cancer pain: role of psychological and behavioral factors. *Pain*, 74, 247–256.
- Van Hemert, A., Hengeveld, M., Bolk, J., et al. (1993). Psychiatric disorders in relation to medical illness among patients of a general medical outpatient clinic. *Psychological Medicine*, 23, 167–173.
- Weissman, D. & Haddox, J. (1989). Opioid pseudoaddiction: An iatrogenic syndrome. Pain, 36, 363–367.
- Zaza, C. & Baine, N. (2002). Cancer pain and psychosocial factors: A critical review of the literature. Journal of Pain and Symptom Management, 24, 526–542.