
Fibromyalgia: a daring new look

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Received on February 18, 2013; accepted
in revised form on May 31, 2013.

Clin Exp Rheumatol 2013; 31 (Suppl. 79):
S3-S5.

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EXPERIMENTAL RHEUMATOLOGY 2013.

Key words: fibromyalgia, torture,
abuse, sexual abuse, somatisation

Fibromyalgia remains not only very difficult to understand, but also extraordinarily challenging for physicians. Many fibromyalgia patients release a flood of complaints during repeated physician visits, often in an aggressive tone, reporting profound dissatisfaction with our inability to relieve their symptoms. The resulting sense of failure that we experience can cause irritation, damaging the patient-physician relationship. Fibromyalgia patients require us to develop our capabilities for empathy and compassion to ensure that we take into consideration all the facets of their disease. Confining our role to the prescription of analgesics is not appropriate. I believe that changing our point of view about fibromyalgia may be crucial to improving patient care. The relative roles for organic and psychosomatic factors in fibromyalgia remain unclear. Nevertheless, investigations of what fibromyalgia patients say during physician visits indicate a high prevalence of dramatically stressful life events (1). Clearly, a possible connection between these events and the disease deserves consideration. Stressful events might leave an indelible organic mark that causes the symptoms. One means of assessing this hypothesis consists in evaluating the prevalence of fibromyalgia in populations with a history of severe adverse life events such as refugees, war veterans, torture victims, and victims of sexual abuse.

In a twin study of potential associations between posttraumatic stress disorder (PTSD) and chronic widespread pain, 1042 monozygotic twins and 828 dizygotic twins completed the Impact of Events Scale (IES) to assess symptoms of PTSD (2). A strong association ($p < 0.0001$) between chronic widespread pain and worse IES scores was found. This association did not differ significantly between monozygotic and dizygotic twins, suggesting that

chronic widespread pain was related to PTSD but not to genetic or other familial factors. Plasma cortisol levels are known to increase during acute stress and to decrease during chronic stress. Fibromyalgia patients have low plasma cortisol levels. A study showed that pain severity in fibromyalgia patients upon awakening in the morning and 1 hour later correlated with increased salivary cortisol values (3). In fibromyalgia, childhood physical abuse predicted flattened diurnal cortisol rhythms as well as greater cortisol responses to awakening (4), and greater severity of emotional or sexual childhood abuse correlated with higher diurnal cortisol levels (5). Thus, childhood abuse may induce long-term abnormalities in hypothalamic-pituitary axis function, which may, in turn, play a role in pain severity. In a study of 70 fibromyalgia patients, Fibromyalgia Impact Questionnaire scores correlated with the number of lifetime loss events and with PTSD symptoms (6).

A chronic multi-symptom illness has been described in Gulf War veterans based on a systematic review of studies published between 1990 and 2004 (7) and the prevalence of chronic widespread pain is higher in War veterans than in non-deployed military personnel (8). The prevalence of fibromyalgia was 19.2% among Gulf War veterans compared to only 9.6% ($p < 0.001$) among other military personnel (9). Among Vietnam War veterans with PTSD, 80% reported chronic pain (10). Several studies in refugees who had been imprisoned and tortured showed a greater than 60% prevalence of chronic pain, as well as significant associations of chronic pain with PTSD symptoms, anxiety, and depression. In one study (11), chronic pain was not always located at the site where torture had been applied. For instance, back pain was associated with sexual or mental torture

Competing interests: none declared.

and suffocation and pain in the feet with torture affecting the entire body (OR 5.64) (12). Although most of the refugees received treatment at a specialised centre, the prevalence of pain increased over the mean 10-year follow-up, from 48% to 58% at the head, 48% to 76% at the back, and 24% to 63% at the feet (11). This finding suggests a role for psychosomatic mechanisms triggered by torture, as opposed to the acts of torture themselves. Interestingly, in a qualitative study, 14 women with fibromyalgia described their pain as a torture-like experience (13).

An association between childhood or adulthood abuse and fibromyalgia has been demonstrated. The number of tender points correlated with childhood abuse (OR, 6.9; 95%CI, 2.0-24.6) (14). However, a history of abuse was reported by 53% of female fibromyalgia patients compared to only 42% of females with other rheumatic diseases, a nonsignificant difference (15). Many studies have shown associations between fibromyalgia and a history of childhood abuse, sexual abuse (incest or rape), and domestic abuse (15-23). Two of these studies each included more than 10,000 patients (17, 18). The severity of the fibromyalgia symptoms increased with the severity of the abuse and was greater when the abuse occurred in childhood. Sexual abuse is associated with psychosomatic illnesses and fibromyalgia. The risks of irritable bowel syndrome, headaches, urological disorders, and gynaecological disorders are increased both in fibromyalgia patients and in patients with a history of sexual abuse. In addition, among patients experiencing no pain, presence of other manifestations of somatisation indicates an increased risk of developing diffuse chronic pain. Thus, fibromyalgia may be a component of a more general somatisation disorder, whose spectrum may include fibromyalgia, chronic fatigue syndrome, irritable bowel syndrome, migraine, panic disorder, depression, and PTSD (24). Conceivably, fibromyalgia may reflect the organic impact of psychological trauma responsible for persistent changes in several hormones (cortisol, serotonin) and in brain struc-

ture and function (as shown by magnetic resonance imaging and functional brain imaging). The organic effect of the psychological trauma may be mediated by absence of verbal expression of the experience, so that the psychological pain is expressed physically instead. The physical expression may serve to protect the patient against intolerable psychological suffering. For instance, living with chronic diffuse pain may be less devastating than persistent awareness of having been raped by one's father. In addition, physical pain is experienced at some time by nearly everyone and may therefore be easier to communicate to others than emotional pain induced by a traumatic event. Under this hypothesis, the complaints about physical pain disguise a request to be acknowledged as a trauma victim. The physical pain merely constitutes a protective armour. Fear of not being believed may amplify the somatisation process, especially when the initial trauma was unrecognized or denied, as is often the case in victims of sexual or domestic abuse. The physician's failure to relieve the physical pain makes sense, as physical pain relief is not what the patient is seeking. Thus, focusing on the physical pain cannot help. A caring and trusting relationship must be established to help the patient remove the protective armour, thus uncovering the true source of the pain. Exquisite sensitivity is in order, as patients who finally accept to confront their deep-seated wounds are highly vulnerable. Patients often use denial for protection, and it may be very difficult to show them that their pain arises from non-physical sources. This concept of fibromyalgia transforms the physician's perception of the patient from a difficult or irritating person to someone who is in urgent need of help to deal with profound suffering. Verbalisation of the trauma by the patient and its recognition by the doctor are essential liberating steps that usually allow a gradual decrease in analgesic therapy and the initiation of multidisciplinary treatment involving a psychotherapist, a psychiatrist, a rheumatologist, and a rehabilitation therapist. Patients improve by rebuild-

ing their psychological structure and regaining ownership of their own body. This concept probably does not apply to all fibromyalgia patients, since a history of victimisation or PTSD is not consistently found. Fibromyalgia patients probably constitute a heterogeneous population, with a subgroup having an association between their symptoms and a history of traumatic events. Furthermore, the effect of trauma varies widely across individuals, so that the same event may induce somatic symptoms in some individuals but not in others. Another point of interest is that most fibromyalgia patients are women. Conceivably, men may use other strategies to cope with psychological pain, such as violent behaviour or addiction. Incidentally, the preferential use of codeine as analgesic by patients with fibromyalgia has been observed, which is probably not a hazard: an up regulation of opioid receptors in the skin of fibromyalgia as been observed (25). Whatever the case, the view that fibromyalgia requires a high level of alertness to the possibility of underlying psychological trauma may prove extremely helpful in everyday practice. One possible benefit may be a decrease in the number and invasiveness of investigations and treatments. Another is the creation of a trusting relationship in which the patient feels safe and acknowledged and is therefore better able to heal.

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