J Rehabil Med 2014; 46: 479–480

LETTER TO THE EDITOR

REGIONAL VERSUS WIDESPREAD PAIN IN PATIENTS WITH CHRONIC LOW BACK PAIN: IT DOES MATTER!

BACKGROUND

Patients with chronic low back pain (LBP) without radiculopathy are commonly classified as either having a specific or a non-specific LBP disorder, with the non-specific type defined as patients with no identifiable injury or disease to the spine. Furthermore, patients with chronic LBP can be sub-grouped as having either predominately regional pain or so-called chronic widespread pain (CWP), having developed muscular pain in other areas (1). Based on evidence-based knowledge about localized vs CWP in patients with chronic LBP, it is reasonable to discuss the differentiated treatment of these patients according to the characteristics and location of the pain.

DISCUSSION

According to the 1990 American College of Rheumatology criteria, CWP is defined as pain reported in both the left and right sides of the body and above and below the waist, including the cervical, thoracic and lower spine and the anterior chest. If all of these criteria are not met, the patient is regarded as having chronic regional pain (CRP). However, we regard this definition as too comprehensive. We have developed a simplified way of defining CRP vs CWP using a pain drawing. Patients reporting pain either above or below the waist are defined as having CRP, while those who report pain both below and above the waist are defined as having CWP. Patients with LBP who report pain above and below the waist have psychological problems significantly more often, especially compared with patients who present pain only below the waist (2).

Chronic regional low back pain

A new and promising classification-based cognitive functional therapy (CB-CFT) programme performed by a physical therapist also seems to be an effective and promising therapeutic option for patients with non-specific LBP when considering return to work (3). These patients can easily be taught to control their pelvis and back movement in a considerably less painful way when performing functional tasks. An improvement in motor control of the lumbar spine may result in less peripheral nociceptive drivers of pain, which again has an impact on pain coping, pain self-efficacy and muscle activity. In this study 58% of patients with LBP who were recruited had CRP according to Kvale et al.'s definition (2).

Today it is sufficient evidence to say that Modic type 1 changes on MRI are associated with LBP, and that patients with such changes should be classified as having specific LBP (4). Modic type 1 changes are, in most cases, a localized disease of the spine with oedema representing inflammation located in 1 or 2 levels of the spine involving the endplates and the vertebras above and below the involved disc. Patients with symptomatic Modic changes have severe back pain located in the same spinal segment according to radiological findings, usually without clinical findings of widespread pain.

Secondary chronic widespread pain

A high percentage of patients with predominately chronic regional LBP develop so-called secondary CWP (5, 6), from non-specific or even specific LBP. For many patients with LBP, the pain can develop as a continuum from regional to secondary widespread pain or, over time, even into fibromyalgia where the back pain is no longer dominating. There are different characteristics in LBP patients with chronic regional pain vs patients with CWP. Patients who have developed widespread muscular pain report more psychological problems (2). Long-term psychological problems and insufficient coping with pain appear to be related to the progression from peripheral to central sensitization and CWP (1, 7).

Clinical implications

Chronic regional pain. It has been documented recently that a CB-CFT, performed by a trained physical therapist for this model, has a far better long-term effect than manual therapy and exercises for pain, disability and sick-leave in patients with predominately regional LBP (3). In this study patients scored a mean of 5.1 on a baseline numeric rating score, indicating a moderate severity of the pain condition. New studies are ongoing to replicate treatment effects with this model in LBP patients with more pain and disability.

In the future there may be a medical treatment for some LBP patients with Modic changes. A double-blind randomized controlled trial has shown recently that antibiotic treatment has an effect on this patient group (8). While the clinical utility of this treatment has been questioned, the fact that there was a positive response to targeted treatment for a specific subgroup supports for the differentiation of pain states based on location and underlying pathology.

Chronic widespread pain. In patients with LBP who have widespread musculoskeletal pain and report severe pain and disability a more extensive multidisciplinary programme, containing cognitive therapy, adjusted training and collaboration with social sector and workplace combined, appears to be more efficient and cost-effective for this patient group (9, 10). It is probably the extent of secondary widespread pain and central sensitization and the degree of psychosocial problems that determine whether a more extensive multidisciplinary programme is necessary or if a brief intervention model is sufficient.

Conclusion

Based on published research on chronic LBP patients, it is important to differentiate between regional and secondary widespread pain when planning targeted therapeutic interventions. Further research is required into the importance of this differentiation. Chronicity and disability can be avoided to a larger extent if the correct treatment is targeted to the correct patient in time.

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Accepted Mar 26, 2014, Epub ahead of print Apr 10, 2014

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