Physiotherapy for Treatment of Sexual Dysfunction in Patients with Chronic Low Back Pain or Musculoskeletal Pain: A Short Overview

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***Abstract*—**Sexual dysfunction (or sexual malfunction or sexual disorder) is difficulty experienced by an individual or a couple during any stage of a normal sexual activity, including physical pleasure, desire, preference, arousal or orgasm. Low back pain, musculoskeletal pain and pain coming from skeletal disorders affect on sexual function. In this short review we focus on association between chronic low back pain or muscular pain with sexual dysfunction in men and women.

***Index Terms*—**Sexual Dysfunction, Low Back Pain, Musculoskeletal Pain.

I. Introduction

Low back pain (LBP) is a common disorder involving the muscles, nerves, and bones of the back.[1] The majority of LBP does not have a clear cause.[2] There are three general types of low back pain by cause: mechanical back pain (including nonspecific musculoskeletal strains, herniated discs, compressed nerve roots, degenerative discs or joint disease, and broken vertebra), non-mechanical back pain (tumors, inflammatory conditions such as spondyloarthritis, and infections), and referred pain from internal organs (gallbladder disease, kidney stones, kidney infections, and aortic aneurysm, among others.[3] Chronic Low Back Pain (CLBP) is a current condition and a major public health problem, which causes considerable disability. In addition to its functional and psychosocial impact, CLBP contributes to the decrease of sexual desire, sexual arousal and satisfaction.[4] A healthy sexual response is a set of four successive stages: desire, arousal, orgasm, and resolution. Sexual dysfunction, therefore, involves some alteration in one or more of the phases of the sexual response cycle, or pain associated to the act, which manifests in a persistent or recurring manner Sexual Dysfunction (SD) (or sexual malfunction or sexual disorder) is characterized by disturbances in one or more stages of the sexual response cycle or by pain associated with the sexual intercourse. All these generate suffering or interpersonal difficulties, making the woman or man incapable of participating in the sexual relation as she or he wishes. Sexual dysfunction is prevalent in both sexes, but in the majority of studies, women are more affected. Studies show prevalence rates as high as 10 to 52% in men versus 25 to 63% in women. [5] Sexual dysfunction is difficulty experienced by an individual or a couple during any stage of a normal sexual activity, including physical pleasure, desire, preference, arousal or orgasm. Indeed, sexual dysfunction requires a person to feel extreme distress and interpersonal strain for a minimum of 6 months (excluding substance or medication-induced sexual dysfunction).[6]

Lack of mobility and Musculoskeletal Pain (MP) can restrict intercourse and limit sexual activity, and gender differences are noted in response to pain. Sexual and relationship counseling should be offered as a component of rehabilitative treatment. Physical therapists are uniquely qualified to provide treatment to address functional activities of daily living, including sexual intercourse, and offer advice for modifications in positioning.[7] It has also been shown that chronic low back pain (CLBP) patients report considerably higher prevalence of sexual problems compared with healthy controls. Sex therapy and sexual management should be added to routine care and treatment of patients with CLBP.[8] The studies have shown that there is association between pelvic floor muscle (PFM) strength and sexual functioning. The findings suggest that both the orgasm and arousal function are related to better PFM function.[9] Pelvic ring injury is also associated with sexual dysfunction in women. [10] The research report that there is a high prevalence of sexual difficulties in patients with chronic pain attending treatment, nearly double that of a general UK survey. [11] The findings indicate that sexual problems are common in chronic pain patients. Patients who reported symptoms of depression and distress had more sexual problems. [12] On the other hand, the involvement of the pelvic floor in sexual function and dysfunction is examined, as well as the potential role of pelvic floor rehabilitation in treatment. Further research validating physical therapy intervention is necessary. [13] It should be also noted that sexual dysfunction is common in men with refractory chronic pelvic pain syndrome but it is unexpected in the mid fifth decade of life. Application of the trigger point release/paradoxical relaxation training protocol was associated with significant improvement in pelvic pain, urinary symptoms, libido, ejaculatory pain, and erectile and ejaculatory dysfunction. [14] The reports indicate that sexual functioning significantly mediates the relationship between pain intensity and depressive symptoms in sexually active patients with chronic low back pain. [15] It has also been shown that vulvar-vaginal atrophy (VVA) symptoms have an approximately linear relationship with sexual functioning. Sexual functioning was most improved when pain on

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intercourse was reduced. Similar magnitudes of improvements in other VVA symptoms were linked with smaller, though potentially beneficial, improvements in sexual functioning. [16] The studies have revealed that more than half of sexually active women with spina bifida experience sexual dysfunction. Therefore, health-care providers should pay attention to the symptoms and their management. [17] Sexual dysfunction may also develop in women with Fibromyalgia syndrome (FMS), based on the severity of the disease and poor sleep quality.[18]

Sexual dysfunction is common worldwide. A study in China (Beijing) shows that female sexual problems are highly prevalent in Beijing. Dissatisfaction with the spouse's sexual ability, poor marital affection, sexual difficulties of the spouse, dissatisfaction with the marriage, rural life, CPP, and postmenopausal were conceivable risk factors for female sexual problems in Beijing women. [19] Because of its holistic approach, physiotherapy can contribute significantly to the multidisciplinary assessment and treatment of female sexual dysfunction. [20] The research show a relationship between sexual abuse and pain to a Swedish population suffering from musculoskeletal complaints. [21] Chronic widespread pain (CWP) patients report more sexual pain and sexual distress compared with controls. Assessment of sexual problems should therefore be added to routine care of patients with CWP. [22]

In contrast to numerous studies indicating relationship between musculoskeletal pain and sexual dysfunction, some studies have found that musculoskeletal pain does not seem to affect patients' sexual function, but it negatively affects Patients' quality of life. [23] However, a study on the effect of musculoskeletal pain on sexual function in middle-aged and elderly European men shows that musculoskeletal pain is associated with several aspects of sexual functioning. These relationships differ depending on the extent of the pain (chronic or not) and are also largely confounded by other health-related factors, primarily depression. [24] The findings also suggest that musculoskeletal pain can influence sexuality of male adolescents and adults with juvenile idiopathic arthritis. [25] Women with pelvic floor dysfunction (PFD) also have a large burden of sexual dysfunction, although this appears to be mediated by factors not unique to PFD. [26] Investigation on sex life and sexual function in men and women before and after total disc replacement compared with posterior lumbar fusion shows that impairment of sex life appears to be related to chronic low back pain. [27]

It appears that the surgically induced pain reduction related improvement in overall sexual function may be counteracted by the surgically induced neurological disturbance, when performing lumbar fusion for chronic low back pain. The anterior approach appears to be associated with an increased risk of sexual dysfunction in men. [28] Sexual health is also affected by rheumatoid arthritis in different ways. Physiotherapy can play an active role in improving sexual health for patients with rheumatoid arthritis. [29].

II. Conclusion

Sexual dysfunction is a considerable condition in men and female suffering low back pain or musculoskeletal pain, however, females are more affected than male. Physiotherapy can help the patients to overcome their sexual problems in addition to other therapies which are recommended by experts.

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