Editorial

Low Back Pain and Menopause


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Women spend nearly one-third of their life in menopause.[1] In this period, besides other comorbid conditions, women suffer from the onslaught of various musculoskeletal disorders also. One such problem is chronic low back pain (LBP) which is more prevalent in women than in men, and it also increases with age.[2] According to Dedicação *et al*., about 70% of perimenopausal women have symptoms related to estrogen deficiency, such as vasomotor instability, sleep disorders, decreased bone mineral density, genitourinary atrophy, lipoprotein changes, and musculoskeletal pain, the latter being reported by more than half of the perimenopausal women.[3] Most studies show that women with a higher menopause symptom burden may be the most vulnerable for chronic back pain.[4] Despite this, little attention has been paid to pain in the spine/low back ache and various problems of peripheral joints which are equally prevalent in this period of life.[5] A biopsychosocial model of chronic pain attributes sex differences in pain to interactions between biological, psychological, and sociocultural factors such as social class, low levels of education, and low income.[6] The heightened pain sensitivity among women can also partially explain greater reports of pain by women compared to men.[7] Population-based studies have shown that the prevalence of widespread pain increases with age, peaking in the seventh and eighth decades. Recently, it has been shown that genetics also plays a role in the development of LBP.[8] Estrogen participates in a variety of biological processes through different molecular mechanisms. Collagen wasting is commonly observed in bone and skin in the postmenopausal period due to decreased estrogen levels.[9] Hormone replacement therapy (HRT) has been shown to be protective against menopause-associated osteoarthritis.[2] However, in one study, Musgrave *et al*.[10] reported that women taking HRT suffered more back pain and back pain-related disability than did those not taking HRT. An in-depth understanding of the role of the gonadal hormones in LBP modulation remains unclear; whether HRT is useful for patients with severe LBP warrants further studies.

At some point in life, 36.4% to 58% of people in European countries and in the United States experience LBP.[11] This poses a great medical and socioeconomic challenge to such extent that some researchers call it a lifestyle disease. It is the main cause of absence in the workplace and the second cause of visiting primary health-care professionals. Spine pain has negative psychological consequences as it impairs daily functioning of the affected person. It also poses a serious socioeconomic problem – it is costly due to disability-related absence in the workplace.[3] Various modalities of management of LBA proposed include physiotherapeutic procedures, exercises, manual therapy, massage, and physical measures. Pharmacology is also used, for example, analgesics, nonsteroidal anti-inflammatory drugs, and muscle relaxants. The American Pain Society and American College of Physicians stated that there is good evidence that specific physical exercises recommended by a physiotherapist have a moderate positive effect in LBP. These organizations also pointed out that there is no good evidence for physical therapies (transcutaneous electrical nerve stimulation and ultrasound) for LBP and so they do not recommend their use.[12] Exercises in safe positions (with a minimal risk of worsening the pain), i.e. supine position, and exercises strengthening the floor of the pelvis, the transversus abdominis, and the multifidus muscles are the most important stabilizers of the lower parts of the spine. It is thus concluded that perimenopausal stage of life is associated with an increased incidence of LBP. Increased body mass index (≥30) is one of the factors increasing the prevalence of pain. Suggested forms of treatment include physiotherapeutic procedures such as physical exercises, massage, manual therapy, and proper physical postures along with drug therapy in selective patients. Further studies are necessary in the area of treatment of pain and association with LBP.

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Quick Response Code:

Website: www.jmidlifehealth.org

DOI: 10.4103/jmh.JMH_176_19

How to cite this article: Mahajan A, Patni R, Verma S. Low back pain and menopause. J Mid-life Health 2019;10:163-4.