THE INSOMNIA EFFECT ON MUSCULOSKELETAL PAIN PERCEPTION IN POSTMENOPAUSAL WOMEN

Autores

Cristina Frange 1, Helena Hachul 1,2, Camila Hirotsu 1, Sergio Tufik 1, Monica Levy Andersen 1

Afiliação

Departamentos de 1 Psicobiologia, 2 Ginecologia, Universidade Federal de São Paulo, São Paulo, SP, Brazil

Introduction: Menopause encompasses the loss of ovarian reproductive function. It is a physiological, natural process of aging. With the increase in life expectancy, more than one third of women will spend their life span in the postmenopausal stage, and probably face menopausal symptoms, caused by hormonal alterations of the period. Two core menopausal symptoms are musculoskeletal pain (MSP) and insomnia. Objective: To investigate the association between MSP and insomnia on number of pain sites, severity, interference on daily function and intensity of pain, and sleep pattern in postmenopausal women. Methods: A cross-sectional case-control study in 4 groups of postmenopausal women: control (CTRL), musculoskeletal pain (MSP), insomnia (INS) and insomnia+musculoskeletal pain (INS+MSP) was approved by Ethical Committee of our Institution (#786.299/2014). Menopausal status and insomnia was diagnosed at a medical appointment. Patients completed a form on age, clinical and social data. Sixtytwo participants answered Nordic Musculoskeletal Pain Questionnaire (number of pain sites), Brief Pain Inventory (pain severity and interference on daily function), pain diaries (Visual Analog Pain Scale upon awakening, at mid-day and before going to bed, during 10 days) and 43 underwent a full night polysomnography exam. Results: The INS+MSP group presented a higher frequency of women reporting 3 or more pain sites (88.2%) compared to other groups (2=64.95; df=1; P<0.01). Insomnia by itself was associated with pain severity (F=10.31; df=1; P<0.05), pain interference on daily function (F=10.53; df=1; P<0.05), increased pain intensity at mid-day (F=5.22; df=1; P<0.05) and increased sleep fragmentation (F=5.61; df=1; P<0.05), independent of chronic MSP. Conclusions: The group with both comorbidities had more pain sites. Insomnia was associated to more pain complaints and with sleep fragmentation. Relief of pain generated by sleep was evident only until the first half of the day. Through physiotherapeutic resources we can treat and prevent pain, in order to improve sleep and also interrupt the perpetuation of the sleep-MSP cycle, avoiding the negative consequences of menopausal symptoms.

Key Words: Sleep - Musculoskeletal pain - Postmenopause - Insomnia - Quality of life.