Chronic pain and menopausal symptoms

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Menopausal symptoms affect the majority of women, but for some women the symptoms are disabling. The symptoms most commonly associated with menopause are hot flashes and sweats.\textsuperscript{1,2} Even among Asian women, who were thought to report a different spectrum of symptoms from women in Western countries, vasomotor symptoms are reported if women are asked about them using validated questionnaires in community-based samples.\textsuperscript{3}

Menopausal stage rather than age is the critical determinant of the prevalence of vasomotor symptoms. Although there is overlap in what has been reported for the prevalence of flashes and sweats in pre-, peri- and postmenopausal women,\textsuperscript{4} the prevalence of symptoms peaks in women in their early postmenopausal years\textsuperscript{5} with over 1/4 of postmenopausal women aged less than 55 years being moderately–severely bothered by vasomotor symptoms. It is, however, important to reflect that menopausal symptoms occur within the specific context of a woman’s life and the impact of her menopausal symptoms is likely to be affected by that context.\textsuperscript{6}

The study by Gibson et al in this issue of the journal\textsuperscript{7} reports that female veterans aged 45 to 64 years, who were identified as having menopausal symptoms, were more likely to have chronic pain and conclude that recognizing the interrelatedness of these issues might improve the care of women at midlife. The women in the study were not described by menopausal stage, however since the mean age of menopause at midlife. The women in the study were not described by menopausal stage, however since the mean age of menopause in women with European ancestry is 51 years,\textsuperscript{8} it is likely that the majority were postmenopausal.

The ascertainment of menopausal symptoms is problematic. The multiplicity of questionnaires developed for this purpose is testament to the challenge of measuring the impact of menopausal symptoms on women. The optimal method of assessing menopausal symptoms is currently the subject of review (COMMA core outcomes in menopause), which is part of the Core Outcome Measures in Effectiveness Trials (COMET)\textsuperscript{9} initiative. In the Gibson study, women were considered to have menopausal symptoms if their visits to the VA healthcare system had relevant ICD-9 codes on at least two occasions or they had been prescribed medication specifically for menopausal symptoms on at least one occasion. The ICD-9 codes used were predominantly codes for vasomotor symptoms, although they also included nonspecific symptoms such as headache. This method of categorizing women as having menopausal symptoms is likely to identify women at the more severe end of the symptom spectrum as even among women with moderate–severe symptoms, only a relatively small proportion receive treatment.\textsuperscript{10}

The Gibson study also used ICD-9 codes to identify women with chronic pain documented on at least two occasions within a 90-day period. There was a diverse range of pain codes included with the highest number of codes relating to back pain, followed by neck pain and joint pain, but other codes included headache/migraine. By these criteria, 52% of participants had chronic pain and over 20% had chronic pain at more than one site. Two visits for pain within 3 months for prescription medication also suggest these women have pain at the upper end of the pain spectrum, beyond what is manageable with nonprescription analgesics.

Musculoskeletal symptoms are a recognized aspect of the symptoms experienced by women during and after menopause, and validated instruments for assessing menopausal symptoms include questions about musculoskeletal pain. Women who report vasomotor symptoms are more likely to report musculoskeletal pain.\textsuperscript{11} So in the Gibson study, is the association between “menopausal symptoms” and “chronic pain” explained by both sets of symptoms being part of the spectrum of menopause? And has this study identified a subset of women with symptoms at the extreme end for both?

The study has a number of strengths, one of which is the very large sample size, although this also means that relatively modest associations may reach high levels of statistical significance. In the model for pain, the odds ratio for menopausal symptoms, although highly statistically significant, was less than 2 and lower than that for the association with a mental health diagnosis. It is unclear what proportion of the total variation in the likelihood of pain is explained by the full model of factors associated with chronic pain in this paper.

One limitation affecting the generalizability of the findings is that all participants were veterans. The special needs of veterans in relation to health care are well recognized. Veterans are reported to have greater physical and psychosocial needs as well as generally experiencing a lower than average level of social support.\textsuperscript{12} Although commonly thought of as a consequence of exposure to combat, posttraumatic stress disorder in...
female veterans can occur after events such as loss of a colleague or exposure to sexual violence. Features of posttraumatic stress disorder include sleep disturbance and depression, which are well-recognized modulators of the experience of pain.

Gibson et al suggest that documenting the association between menopausal symptoms and chronic pain may lead to improved health care at midlife. Simplistically, if bothersome menopausal symptoms in a woman with chronic pain were relieved by menopausal hormone therapy, the resulting improvement in her sleep might extend to a reduction in her need for pain medication. As Gibson et al also suggest, truly integrated care could, however, identify and address underlying issues (such as anxiety and depression) which might well impact both menopausal symptoms and chronic pain.

**REFERENCES**