Temporomandibular Disorder-Induced Pain Likely to Worsen in Late Menopause Transition

New study evaluates the influence of menopause symptoms on the intensity of temporomandibular disorder-induced pain throughout the full menopause transition

CLEVELAND, Ohio (May 11, 2022)—The loss of estrogen during the menopause transition can cause a number of physical changes and health concerns—from thinning hair and atrophied vaginal mucous membranes to hot flashes and increased risk for osteoporosis and cardiovascular disease. A new study suggests that it may also increase jaw pain resulting from temporomandibular disorder (TMD). Study results are published online today in *Menopause*, the journal of The North American Menopause Society (NAMS).

It is estimated that 4.8% of US adults (roughly 12 million people) have had pain in the region of the temporomandibular joint (near the jaw). Some estimates are as high as 15% of US adults who have had at least one symptom of TMD, which is the second most common musculoskeletal pain (with low back pain being first). Women are twice as likely as men to develop TMD, which has led to theories that the disorder is influenced by hormone changes.

To date, there is limited literature about the prevalence of TMD during the menopause transition, although a 2018 study showed that TMD was more common and severe in premenopausal versus postmenopausal women. The results were not surprising because there are estrogen and progesterone receptors in the temporomandibular joint discs.

In this new study, women were divided into groups on the basis of their menopause stage (late menopause transition, early postmenopause, and late postmenopause) to evaluate differences in the intensity of their TMD-induced pain. Based on the results, the researchers concluded that TMD-induced pain and menopause symptoms are primarily correlated in the late menopause transition. Both diminish with age and progression through the postmenopause phases. In addition, socioeconomic factors such as education and ethnicity also affect TMD symptoms in women during early postmenopause. These results suggest the value of evaluating women for TMD as they approach the menopause transition.

Study results are published in the article “Does temporomandibular disorder correlate with menopausal symptoms?”

“This study reinforces the known relationship between sex steroids, specifically estrogen, and the experience of pain. These results are unique in showing that TMD symptoms are linked with menopause symptoms and manifest differently across the menopause stages, with more prominent TMD and menopause symptoms occurring in the menopause transition compared with the years postmenopause. More study is needed to identify factors, such as low education, that influence these associations as well...”
as strategies to mitigate bothersome TMD and menopause symptoms in midlife women,” says Dr. Stephanie Faubion, NAMS medical director.

For more information about menopause and healthy aging, visit www.menopause.org.

Founded in 1989, The North American Menopause Society (NAMS) is North America’s leading nonprofit organization dedicated to promoting the health and quality of life of all women during midlife and beyond through an understanding of menopause and healthy aging. Its multidisciplinary membership of 2,000 leaders in the field—including clinical and basic science experts from medicine, nursing, sociology, psychology, nutrition, anthropology, epidemiology, pharmacy, and education—makes NAMS uniquely qualified to serve as the definitive resource for health professionals and the public for accurate, unbiased information about menopause and healthy aging. To learn more about NAMS, visit www.menopause.org.