Bone-loss score may tip off doctors to gum disease in postmenopausal women

February 17 2015

Postmenopausal women susceptible to bone fractures may also be a higher risk for gum disease, according to researchers at Case Western Reserve University School of Dental Medicine and Case/Cleveland Clinic Postmenopausal Health Collaboration (CCCPOHC).

Researchers found a link between postmenopausal women with high scores on a Fracture Assessment Risk Tool (known as FRAX), and symptoms of severe gum disease, said Leena Palomo, DDS, MSD, associate professor of periodontics and director of DMD Periodontics program at the university's dental school.

"More investigations are needed," she said, "but the FRAX Tool score can potentially be used as a way to find women at risk for gum disease."

Palomo; Holly L. Thacker, MD, NCMP, FACP at Cleveland Clinic's Women's Health Institute; Foluke Alli, MD, NCMP, at Cleveland Clinic; and Gazabpreet K. Bandal, DDS, in the Case Western Reserve periodontics department, reported their findings in the Menopause article, "Can the FRAX tool be a Useful Aid for Clinicians to Refer Patients for Periodontal Care?"

In 2002, Palomo was among the first researchers in the country to begin analyzing periodontal (gum) disease in post-menopausal women. Over the past decade, she has teamed up with researchers in CCCPOHC.

Women can suffer a rapid spike in bone loss in the first decade after the
onset of menopause as estrogen levels drop.

Lower estrogen levels also impact the mouth and cause inflammatory changes in the body that can lead to gingivitis, a precursor to gum disease, Palomo said. If untreated, the result is tooth loss.

Knowing how bone loss occurs throughout the body in menopause, the researchers also were interested in the oral-physical connections.

The researchers set out to find a way for doctors to identify women at risk for both gum disease and osteoporosis. They tested the hypothesis that women at-risk for bone fractures might also be at-risk for gum disease.

FRAX scores take into account weight, height, previous fractures, rheumatoid arthritis, smoking habits, diabetes and other factors.

"Many of these factors are also markers for gum disease," Palomo said.

Using CCCPOHC's database of 853 women, they found a sample of 191 women between ages 51 and 80 who had gone through menopause within the last 10 years, didn't smoke and were not on hormonal replacement therapy, bone loss medicines for at least five years or diabetes medication.

All women had FRAX scores and a periodontal check-up that measured probing depth for the gums, tooth loss and attachment loss from ligaments holding teeth to bone. The women were divided into groups with high- and low-risk FRAX scores.

Researchers found that women with high FRAX scores also showed the strongest signs of gum disease, a result that suggests bone-loss scores could provide a reliable indicator of gum disease.
But there's a drawback: "Medical insurance does not cover dental procedures," Palomo said, calling for a change in health insurance policies to cover gum disease because it's linked to a woman's overall health.

Provided by Case Western Reserve University


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