New study suggests kidney function is associated with tooth loss in postmenopausal women

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Kidneys play a critical role in overall health by removing waste products from the blood. When they fail to sufficiently filter out foreign elements, several serious, life-threatening, medical conditions can result. A new study suggests that chronic kidney disease may also be linked with tooth loss. Survey results are published in the article titled "Chronic kidney disease in postmenopausal women is associated with tooth loss" in the journal *Menopause*.

A woman's glomerular filtration rate shows how well her kidneys are functioning. Kidney function decreases with time after menopause and is associated with declining reproductive hormone levels. These hormone changes during menopause also often lead to abdominal obesity, which is an *independent risk factor* for the development of *chronic kidney disease* and also linked with a higher risk of *tooth loss*.

The consequences of kidney disease are numerous, including an increased probability of experiencing problems with bone and cardiovascular health. Tooth loss, which reflects oral health status, is also associated with systemic diseases, such as diabetes, thyroid disease, and osteoporosis, and is independently associated with an increased risk of stroke. Excessive tooth loss can also impair chewing and speech.

Previous studies have identified an association between kidney function and tooth count. This newest study involving nearly 65,000 participants,
however, is the first known to evaluate the association between chronic kidney disease and tooth loss in postmenopausal women across the ages.

It concluded that the glomerular filtration rate, a measure of kidney function, is significantly associated with having at least 20 (of a total of 28) adult teeth, suggesting that chronic kidney disease and tooth loss are significantly associated, especially in postmenopausal women aged 66 to 79 years.

These findings suggest that preventing and managing mineral and bone metabolism disorders in postmenopausal women with chronic kidney disease are crucial to prevent tooth loss. It is also important to address kidney disease progression, as the consequences affect multiple body systems beyond just oral health.

"This study highlights the known link between chronic kidney disease and bone metabolism. Increased attention to oral and bone health is warranted in postmenopausal women with chronic kidney disease, in addition to meticulous efforts aimed at preserving kidney function. Conversely, oral health is a window to overall health, and good oral hygiene is important for women of all ages," says Dr. Stephanie Faubion, medical director for The Menopause Society.

More information: Na-Yeong Kim et al, Chronic kidney disease in postmenopausal women is associated with tooth loss, Menopause (2024). DOI: 10.1097/GME.0000000000002375

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