



Body iodine status in women with postmenopausal osteoporosis.

[Arslanca T¹](#), [Korkmaz V](#), [Arslanca SB](#), [Karadag B](#), [Ergün Y](#).

Author information

Abstract

OBJECTIVE: Postmenopausal osteoporosis is a frequent cause of morbidity and can negatively impact life expectancy; iodine is an essential element for bone mineralization, and iodine deficiency is frequently observed. The aim of the present study was to understand the connection between postmenopausal osteoporosis and the level of iodine in the body.

METHODS: A total of 132 participants were divided into three groups: group 1 consisted of healthy postmenopausal women (n=34), group 2 comprised osteopenic women (n=38), and group 3 included women with postmenopausal osteoporosis (n=60). The three groups were compared according to demographic, clinical, and laboratory findings.

RESULTS: The urinary iodine levels were recorded as 216.1 ± 125.2 in the control group, 154.6 ± 76.6 in the osteopenic group, and 137.5 ± 64.9 in the postmenopausal osteoporosis group ($P < 0.001$). These differences were maintained after adjustment for body mass index ($P < 0.001$). The urinary iodine level accurately correlated with the total T-score for the lumbar spine ($r = 0.236$, $P = 0.008$). Multiple regression analysis showed that corrected for body mass index, alkaline phosphatase isoenzyme, and urinary deoxypyridinoline, the urinary iodine level was significantly associated with total T-score (beta coefficient = 0.270, $P = 0.006$).

CONCLUSIONS: The urinary iodine level was significantly lower in women with postmenopausal osteoporosis, and iodine replacement may be important in preventing osteoporosis in areas where iodine deficiency is endemic.

PMID: 28953213 DOI: [10.1097/GME.0000000000000987](https://doi.org/10.1097/GME.0000000000000987)

LinkOut - more resources