

Coeliac disease - A silent cause of bone loss in midlife

Bronwyn Stuckey^{1,2,3} Joanna Wagner¹, Jocelyn Tan¹, Smilja Dragovic¹, Lee Ann Mahoney¹

1. Keogh Institute for Medical Research;
2. Department of Endocrinology and Diabetes, Sir Charles Gairdner Hospital
3. School of Medicine and Pharmacology, University of Western Australia, Nedlands, Western Australia

Background: Sometimes contributing causes of osteoporosis are not obvious. Coeliac disease (CD) is not always manifest by gut symptoms and may present as osteoporosis. In this study we have surveyed participants with coeliac disease to document a) investigations for bone health, b) prescription of bone preserving medication and c) tolerance of intolerance of anti-resorptive medications.

Methods: Participants with CD were recruited through the Coeliac Society of WA and completed an online questionnaire. Ethics approval was from the SCGH Human Research Ethics Committee.

Results: 80 participants with CD completed the questionnaire. Of these 90% had CD diagnosed in adulthood and 39% before the age of 50 years. 42% did not recognise any suggestive symptoms before diagnosis, but in 34% osteoporosis or fracture was identified before the diagnosis of CD. In 29% osteoporosis or a fracture was identified after the diagnosis of CD. 14 participants with CD had not had a bone density performed, including 4 over 50 years old. 32% of participants had sustained a minimal trauma fracture. 37 (46%) of participants had received medication for bone strength. 36 respondents thought CD had compromised management of their bone health. Given reasons were intolerance of medication, particularly oral medication (41%), low dairy intake (15%) and fatigue (21%).

Conclusion: Coeliac disease should be excluded as contributing to osteoporosis in the postmenopausal woman, regardless of the absence of gut symptoms. Patients with CD should have screening bone density especially at menopause. Patients with CD may not tolerate oral medications, particularly biphosphonates.