

Bone Mineral Density Screening and the Frequency of Osteopenia/Osteoporosis in Turkish Adult Patients with Celiac Disease

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Dear Editor,

In their interesting study, Sayar et al¹ utilized a dual-energy x-ray absorptiometry (DEXA) scan to evaluate bone mineral density (BMD) in Turkish adult patients with celiac disease (CD) at diagnosis and/or in the follow-up after the gluten-free diet (GFD). Sayar et al¹ found that the prevalence of osteoporosis and osteopenia was 15.2% and 67.3%, respectively, at the lumbar spine, and 10.8% and 43.4%, respectively, at the femur. After the GFD, the prevalence of osteoporosis and osteopenia was 8.9% and 61.5%, respectively, at the lumbar spine, and 2.5% and 37.1%, respectively, at the femur. Accordingly, Sayar et al¹ recommended that all CD patients need to undergo a DEXA scan to define the follow-up and/or treatment characteristics. Sayar et al¹ mentioned few study limitations. I believe that the following limitation is relevant. To accurately interpret BMD values measured by DEXA scan, BMD reference values (BMDRVs) are needed. As BMDRVs are controlled by numerous factors such as age, gender, ethnicity, weight, pubertal stage, and socioeconomic standard,²⁻³ normative BMDRVs have been constructed for certain populations to be employed in clinical settings and researches centers. Interestingly, Turkey is among pioneer countries that have already formulated their BMDRVs.⁴ Regrettably, Sayar et al¹ had referred in the study methodology to the foreign BMDRVs⁵ instead of the national standard. Hence, this methodological

limitation might question the correctness of the study results and recommendations presented by Sayar et al.¹

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REFERENCES

1. Sayar S, Aykut H, Kaya Ö, et al. Bone mineral density screening and the frequency of osteopenia/osteoporosis in Turkish adult patients with celiac disease. *Turk J Gastroenterol.* 2021;32(7):600-607. [\[CrossRef\]](#)
2. Arabi A, Nabulsi M, Maalouf J, et al. Bone mineral density by age, gender, pubertal stages, and socioeconomic status in healthy Lebanese children and adolescents. *Bone.* 2004;35(5):1169-1179. [\[CrossRef\]](#)
3. Wu Q, Lefante JJ, Rice JC, Magnus JH. Age, race, weight, and gender impact normative values of bone mineral density. *Gend Med.* 2011;8(3):189-201. [\[CrossRef\]](#)
4. Manisali M, Ozaksoy D, Yilmaz E, et al. Bone mineral density reference values in the normal female and male population of Izmir, Turkey. *Eur Radiol.* 2003;13(1):157-162. [\[CrossRef\]](#)
5. Camacho PM, Petak SM, Binkley N, et al. American Association of Clinical Endocrinologists and American College of endocrinology clinical practice guidelines for the diagnosis and treatment of postmenopausal osteoporosis – 2016: executive summary. *Endocr Pract.* 2016;22(9):1111-1118. [\[CrossRef\]](#)

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