ISSN 1007-9327 (print)
ISSN 2219-2840 (online)

World Journal of *Gastroenterology*

World J Gastroenterol 2021 July 21; 27(27): 4252-4483

Published by Baishideng Publishing Group Inc

World Journal of Gastroenterology

Contents

Weekly Volume 27 Number 27 July 21, 2021

REVIEW

MINIREVIEWS

ORIGINAL ARTICLE

Retrospective Study

Contents

ABOUT COVER

Editorial Board Member of *World Journal of Gastroenterology*, Jong-Inn Lee, PhD, MD, Member of Healthcare Review and Assesment Committee in Seoul, Institute of Heakthcare Insurande Review and Assesment Service, Review and Assesment Division 3, 135, Jungdae-ro (IT Venturetower East Building 9th Floor), Songpa-gu, Seoul 05717, South Korea. jileesto@hira.or.kr

AIMS AND SCOPE

The primary aim of *World Journal of Gastroenterology* (*WJG*, *World J Gastroenterol*) is to provide scholars and readers from various fields of gastroenterology and hepatology with a platform to publish high-quality basic and clinical research articles and communicate their research findings online. *WJG* mainly publishes articles reporting research results and findings obtained in the field of gastroenterology and hepatology and covering a wide range of topics including gastroenterology, hepatology, gastrointestinal endoscopy, gastrointestinal surgery, gastrointestinal oncology, and pediatric gastroenterology.

INDEXING/ABSTRACTING

The *WJG* is now indexed in Current Contents®/Clinical Medicine, Science Citation Index Expanded (also known as SciSearch®), Journal Citation Reports®, Index Medicus, MEDLINE, PubMed, PubMed Central, and Scopus. The 2021 edition of Journal Citation Report® cites the 2020 impact factor (IF) for *WJG* as 5.742; Journal Citation Indicator: 0.79; IF without journal self cites: 5.590; 5-year IF: 5.044; Ranking: 28 among 92 journals in gastroenterology and hepatology; and Quartile category: Q2. The *WJG*'s CiteScore for 2020 is 6.9 and Scopus CiteScore rank 2020: Gastroenterology is 19/136.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: *Yan-Xia Xing*; **Production Department Director:** *Xiang Li*; **Editorial Office Director:** *Ze-Mao Gong*.

NAME OF JOURNAL
World Journal of Gastroenterology

ISSN
ISSN 1007-9327 (print) ISSN 2219-2840 (online)

LAUNCH DATE
October 1, 1995

FREQUENCY
Weekly

EDITORS-IN-CHIEF
Andrzej S Tarnawski, Subrata Ghosh

EDITORIAL BOARD MEMBERS
http://www.wjgnet.com/1007-9327/editorialboard.htm

PUBLICATION DATE
July 21, 2021

INSTRUCTIONS TO AUTHORS
https://www.wjgnet.com/bpg/gerinfo/204

GUIDELINES FOR ETHICS DOCUMENTS
https://www.wjgnet.com/bpg/GerInfo/287

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH
https://www.wjgnet.com/bpg/gerinfo/240

PUBLICATION ETHICS
https://www.wjgnet.com/bpg/GerInfo/288

PUBLICATION MISCONDUCT
https://www.wjgnet.com/bpg/gerinfo/208

ARTICLE PROCESSING CHARGE
https://www.wjgnet.com/bpg/gerinfo/242

STEPS FOR SUBMITTING MANUSCRIPTS
https://www.wjgnet.com/bpg/GerInfo/239

ONLINE SUBMISSION
https://www.f6publishing.com

World Journal of Gastroenterology

Submit a Manuscript: https://www.f6publishing.com

World J Gastroenterol 2021 July 21; 27(27): 4481-4483

DOI: 10.3748/wjg.v27.i27.4481

ISSN 1007-9327 (print) ISSN 2219-2840 (online)

LETTER TO THE EDITOR

Is there higher percentage of undetected osteopenia and osteoporosis among patients with ulcerative colitis in Saudi Arabia?

Ivna Olic Akrapovic, Mislav Radic, Ante Tonkic

ORCID number: Ivna Olic Akrapovic Not Applicable; Mislav Radic 0000-0003-0350-6800; Ante Tonkic 0000-0002-3217-6890.

Author contributions: Akrapovic Olic I and Radic M designed research; Akrapovic Olic I performed research; Akrapovic Olic I and Radic M analyzed data; Akrapovic Olic I wrote the letter; Radic M and Tonkic A revised the letter.

Conflict-of-interest statement: The authors declare no conflicts of interest.

Manuscript source: Unsolicited manuscript

Specialty type: Gastroenterology

Ivna Olic Akrapovic, Intensive Care Unit of the Department of Internal Medicine, University Hospital Centre Split, Split 21000, Croatia

Mislav Radic, Division of Rheumatology and Clinical Immunology, Centre of Excellence for Systemic Sclerosis Ministry of Health Republic of Croatia, University Hospital Centre Split, Split 21000, Croatia

Mislav Radic, Ante Tonkic, School of Medicine, University of Split, Split 21000, Croatia

Ante Tonkic, Department of Gastroenterology and Hepatology, University Hospital Centre Split, Split 21000, Croatia

Corresponding author: Mislav Radic, PhD, Assistant Professor, Division of Rheumatology and Clinical Immunology, Centre of Excellence for Systemic Sclerosis Ministry of Health Republic of Croatia, University Hospital Centre Split, Soltanska 1, Split 21000, Croatia.
mislavradic@gmail.com

Abstract

Detection of prevalence and development of osteopenia or osteoporosis in patients with inflammatory bowel disease using only bone mineral density could be inappropriate to detect all individuals at risk for osteoporosis. Numerous patients could remain undetected by using only bone mineral density as a screening method, especially in patients with ulcerative colitis. Therefore, trabecular bone score should be used as a complementary method.

Key Words: Inflammatory bowel disease; Osteoporosis; Bone mineral density; Trabecular bone score

Core Tip: Lower body mass index is a predictor of osteoporosis in patients with inflammatory bowel disease however, fracture risk can be increased desite normal bone mineral density. Therefore, use of trabecular bone score would ensure recruitment of individuals with normal bone mineral density at increased risk of fractures in trials.

Citation: Olic Akrapovic I, Radic M, Tonkic A. Is there higher percentage of undetected

and hepatology

Country/Territory of origin: Croatia

Peer-review report's scientific quality classification

Grade A (Excellent): 0
Grade B (Very good): B, B, B
Grade C (Good): C, C, C
Grade D (Fair): 0
Grade E (Poor): 0

Received: January 17, 2021
Peer-review started: January 17, 2021
First decision: February 23, 2021
Revised: March 29, 2021
Accepted: June 25, 2021
Article in press: June 25, 2021
Published online: July 21, 2021

P-Reviewer: Huan C, Kamimura K, Takagi T, Wakao H
S-Editor: Liu M
L-Editor: A
P-Editor: Wang LL

osteopenia and osteoporosis among patients with ulcerative colitis in Saudi Arabia? *World J Gastroenterol* 2021; 27(27): 4481-4483
URL: https://www.wjgnet.com/1007-9327/full/v27/i27/4481.htm
DOI: https://dx.doi.org/10.3748/wjg.v27.i27.4481

TO THE EDITOR

We read with a great interest the study by Ewid *et al*[1], that evaluated the connection between inflammatory bowel disease (IBD) and bone mineral density (BMD) in a sample of adult Saudi patients with IBD from a single center.

One important finding of this study was that Crohn's disease (CD) patients are at a higher risk of developing both osteoporosis and osteopenia than ulcerative colitis (UC) patients, even though the study included more patients with severe clinical disease activity and endoscopic activity in the UC group than in the CD group (25% *vs* 5%, respectively). In spite of disease severity, 78% of UC patients had normal BMD *vs* 44% of CD patients. Fracture risk can be increased despite normal BMD. Maldonado *et al*[2] suggested that current screening does not include all IBD patients at increased risk of fractures. We propose using trabecular bone score (TBS) as a complementary tool; as it discriminates patients at higher risk of fractures better than BMD[3].

According to demographic characteristics in the study, mesalamine use was significantly higher in the UC compared to CD group (81% *vs* 10%, respectively). Due to the sample size of UC group an analysis of BMD according to mesalamine use probably could not have been performed nevertheless, the analysis would be highly informative. Hence, we postulate a question: could mesalamine use have contributed to lower risk of developing osteoporosis in UC compared to the CD cohort?

Krajcovicova *et al*[4] observed no significant difference in the prevalence of low BMD in groups of patients with UC and CD. They observed that corticosteroid therapy and menopause had significant negative effects, whereas combined treatment with an anti-tumor necrosis factor (TNF) α agent and azathioprine had a significant positive effect on Δ BMD at the lumbar spine (BMDL) per year[4].

The study also showed that low BMI is a risk factor for reduced BMD. According to Fawzy *et al*[5] and Steinschneider *et al*[6], increased BMD commonly reported in overweight women may be a result of soft tissue interference, further supporting addition of TBS as a screening method for osteoporosis in research and clinical practice.

An unexpected finding in this study is the lack of correlation between steroid use and BMD. Paggiosi *et al*[7] demonstrated that TBS alone and BMDL in combination with TBS, but not BMDL alone were able to discriminate between glucocorticoid-treated and glucocorticoid-naïve women. In the study by Gulyás *et al*[8] TNF-α inhibition slowed down generalized bone loss in rheumatoid arthritis and ankylosing spondylitis. Effect of anti TNF therapy on bone metabolism was not confirmed by Ewid *et al*[1] hence, the effect is questionable in IBD.

Addition of TBS would enable inclusion of individuals with normal BMD at increased fracture risk. In conclusion, by including both screening methods osteoporotic fracture risk in UC *vs* CD cohort could be assessed more accurately.

REFERENCES

1 **Ewid M**, Al Mutiri N, Al Omar K, Shamsan AN, Rathore AA, Saquib N, Salaas A, Al Sarraj O, Nasri Y, Attal A, Tawfiq A, Sherif H. Updated bone mineral density status in Saudi patients with inflammatory bowel disease. *World J Gastroenterol* 2020; **26**: 5343-5353 [PMID: 32994692 DOI: 10.3748/wjg.v26.i35.5343]
2 **Maldonado FJ**, Al Bawardy BF, Nehra AK, Lee YS, Bruining DH, Adkins MC, Keaveny TM, Johnson MP, Fidler JL, McCollough CH, Fletcher JG. Findings of CT-Derived Bone Strength Assessment in Inflammatory Bowel Disease Patients Undergoing CT Enterography in Clinical Practice. *Inflamm Bowel Dis* 2019; **25**: 1072-1079 [PMID: 30476314 DOI: 10.1093/ibd/izy341]
3 **McCloskey EV**, Odén A, Harvey NC, Leslie WD, Hans D, Johansson H, Barkmann R, Boutroy S, Brown J, Chapurlat R, Elders PJM, Fujita Y, Glüer CC, Goltzman D, Iki M, Karlsson M, Kindmark A, Kotowicz M, Kurumatani N, Kwok T, Lamy O, Leung J, Lippuner K, Ljunggren Ö, Lorentzon M, Mellström D, Merlijn T, Oei L, Ohlsson C, Pasco JA, Rivadeneira F, Rosengren B, Sornay-Rendu E, Szulc P, Tamaki J, Kanis JA. A Meta-Analysis of Trabecular Bone Score in Fracture Risk Prediction and Its Relationship to FRAX. *J Bone Miner Res* 2016; **31**: 940-948 [PMID: 26498132 DOI:

10.1002/jbmr.2734]

4 **Krajcovicova A**, Hlavaty T, Killinger Z, Miznerova E, Toth J, Letkovsky J, Nevidanska M, Cierny D, Koller T, Zelinkova Z, Huorka M, Payer J. Combination therapy with an immunomodulator and anti-TNFα agent improves bone mineral density in IBD patients. *J Crohns Colitis* 2014; **8**: 1693-1701 [PMID: 25175812 DOI: 10.1016/j.crohns.2014.08.004]

5 **Fawzy T**, Muttappallymyalil J, Sreedharan J, Ahmed A, Alshamsi SO, Al Ali MS, Al Balsooshi KA. Association between Body Mass Index and Bone Mineral Density in Patients Referred for Dual-Energy X-Ray Absorptiometry Scan in Ajman, UAE. *J Osteoporos* 2011; **2011**: 876309 [PMID: 21772978 DOI: 10.4061/2011/876309]

6 **Steinschneider M**, Hagag P, Rapoport MJ, Weiss M. Discordant effect of body mass index on bone mineral density and speed of sound. *BMC Musculoskelet Disord* 2003; **4**: 15 [PMID: 12864923 DOI: 10.1186/1471-2474-4-15]

7 **Paggiosi MA**, Peel NF, Eastell R. The impact of glucocorticoid therapy on trabecular bone score in older women. *Osteoporos Int* 2015; **26**: 1773-1780 [PMID: 25743176 DOI: 10.1007/s00198-015-3078-1]

8 **Gulyás K**, Horváth Á, Végh E, Pusztai A, Szentpétery Á, Pethö Z, Váncsa A, Bodnár N, Csomor P, Hamar A, Bodoki L, Bhattoa HP, Juhász B, Nagy Z, Hodosi K, Karosi T, FitzGerald O, Szücs G, Szekanecz Z, Szamosi S, Szántó S. Effects of 1-year anti-TNF-α therapies on bone mineral density and bone biomarkers in rheumatoid arthritis and ankylosing spondylitis. *Clin Rheumatol* 2020; **39**: 167-175 [PMID: 31522318 DOI: 10.1007/s10067-019-04771-3]

Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-3991568
E-mail: bpgoffice@wjgnet.com
Help Desk: https://www.f6publishing.com/helpdesk
https://www.wjgnet.com