

Authors' response

The answer to the letter from Demirkol et al. [1], in reference to the article “Vitamin D level and extent of coronary stenotic lesions in patients with first acute myocardial infarction”.

Our study involved patients admitted to our hospital due to the first acute ST-segment elevation myocardial infarction treated with primary percutaneous coronary intervention. Myocardial infarction was the first symptom of coronary artery disease. Patients with factors that affect the level of vitamin D such as a history of malignancy within the past 5 years, abnormal liver or renal function (serum aminotransferase activity > 40 IU/L, GFR < 60 mL/min/1.72 m²), thyroid or parathyroid disease, sarcoidosis, tuberculosis, rickets type I, II, III, hypophosphatemic rickets, nephrotic syndrome, autoimmune disease, peripheral arterial disease and alcohol consumption were excluded from the study [2–6]. However, the level of vitamin D can be affected by many conditions, then further studies will evaluate all of these conditions that can affect vitamin D levels in patients with acute myocardial infarction.

In our study, the angiographic severity of coronary artery disease was determined based on the Gensini score [7]. Independently, the study population was divided into patients with single

and multivessel coronary artery disease. There is no doubt that future studies are needed to obtain a better clarification of the physiologic range of vitamin D for preventing atherosclerosis and cardiovascular disease.

Conflict of interest: none declared

References

1. Demirkol S, Balta S, Arslan Z, Kucuk U, Unlu M. The association between vitamin D level and extent of coronary stenotic lesions. *Cardiol J*, 2014; 21: 206–207.
2. Holick MF. Vitamin D deficiency. *N Engl J Med*, 2007; 357: 266–281.
3. Alipour S1, Hadji M, Hosseini L et al. Levels of serum 25-hydroxy-vitamin d in benign and malignant breast masses. *Asian Pac J Cancer Prev*, 2014; 15: 129–132.
4. Adams JS, Hewison M. Unexpected actions of vitamin D: New perspectives on the regulation of innate and adaptive immunity. *Nat Clin Pract Endocrinol Metab*, 2008; 4: 80–90.
5. Murr C, Pilz S, Grammer TB et al. Vitamin D deficiency parallels inflammation and immune activation, the Ludwigshafen Risk and Cardiovascular Health (LURIC) study. *Clin Chem Lab Med*, 2012; 50: 2205–2212.
6. Kamycheva E, Sundsfjord J, Jorde R. Serum parathyroid hormone levels predict coronary heart disease: The Tromso Study. *Eur J Cardiovasc Prev Rehabil*, 2004; 11: 69–74.
7. Gensini GG. A more meaningful scoring system for determining the severity of coronary heart disease. *Am J Cardiol*, 1983; 51: 606.

*Beata Goleniewska, Michał Kacprzak, Marzenna Zielińska
Intensive Cardiac Therapy Clinic, Medical University of Lodz,
ul. Sterlinga 1/3, 91–425 Łódź, Poland,
tel/fax: +48 42 664 43 64, e-mail: bgoleniewska@op.pl*