## The relation between coronary artery ectasia and psychological—environmental factors



Cengiz Ozturk<sup>a,\*</sup>, Sevket Balta<sup>a</sup>, Mustafa Demir<sup>a</sup>, Ali Osman Yildirim<sup>a</sup>, Murat Unlu<sup>a</sup>, Zekeriya Arslan<sup>b</sup>, Sait Demirkol<sup>a</sup>, Turgay Celik<sup>a</sup>

Dear Editor

We read the article Coronary artery ectasia A sample from Saudi Arabia written by Almansori etal. [1] with great interest. The authors showed that the prevalence of coronary artery ectasia in Saudi Arabia was higher than what has been published in previous studies and a significant number of patients had severe disease. Why is the prevalence of coronary artery ectasia in Saudi Arabia high compared to the previous studies? There are some comments that need to be discussed.

In the study [1], it was reported that an interventional cardiologist had reviewed all angiograms and classified ectatic segments of the coronary arteries according to the Markis classification. We thought that the ectatic segments of the coronary arteries would be analyzed at least by two interventional cardiologists, as there may be some differences between observers; analysis of intraobserver and interobserver differences is important.

We often encounter ectasia of the coronary arteries during invasive coronary angiogram in our daily practice. What is the importance of this situation? Some reports show that the coronary artery ectasia is thought of as a variant of atherosclerosis and coronary artery ectasia had the same clinical parameters and pathophysiologic processes. In addition, the ectatic segments may tend to have more thrombus formation and slow flow compared to the normal segments [2–6].

Depression is a strong predictor of cardiovascular events [7]. There is a recent report about the relation between coronary artery ectasia and anxiety and depression [8]. It was shown that the patients with coronary artery ectasia were less anxious and less depressive than the coronary obstructive disease patients. They concluded that autonomic nervous system imbalance had a possible role for explaining pathophysiological mechanism of the ectatic segments. Do the Saudi patients have less anxiety and depression? In addition, the possibility comes to mind that the hot climate may affect psychological condition

Disclosure: Authors have nothing to disclose with regard to commercial support.

Received 30 June 2015; accepted 23 December 2015. Available online 6 January 2016

\* Corresponding author at: Department of Cardiology, Gulhane Medical Faculty, Gulhane Askeri Tıp Akademisi, Kardiyoloji Kliniği Etlik, 06000 Ankara, Turkey.

E-mail address: drcengizozturk@yahoo.com.tr (T. Celik).



P.O. Box 2925 Riyadh – 11461KSA Tel: +966 1 2520088 ext 40151 Fax: +966 1 2520718 Email: sha@sha.org.sa URL: www.sha.org.sa



1016–7315 © 2016 The Authors. Production and hosting by Elsevier B.V. on behalf of King Saud University. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).





<sup>&</sup>lt;sup>a</sup>Department of Cardiology, Gulhane Medical Faculty, Ankara

<sup>&</sup>lt;sup>b</sup>Department of Cardiology, Ankara Mevki Military Hospital, Ankara

a,b Turkey

ofthe patients in Saudi Arabia. Do the authors have any comments about this idea? We think that further studies will need to explain the effects of psychological–environmental factors on patients with coronary artery ectasia.

## References

- [1] Almansori MA, Elsayed HA. Coronary artery ectasiaa sample from Saudi Arabia. J Saudi Heart Assoc 2015;27:160–3.
- [2] Aksu T, Uygur B, Durukan Koar M, Gray U, Arat N, Korkmaz S, et al.. Coronary artery ectasia: its frequency and relationship with atherosclerotic risk factors in patients undergoing cardiac catheterization. Anadolu Kardiyol Derg 2011;11:280–4 [in Turkish].
- [3] Altparmak IH, Kaya Z, Sezen H, Aydn MS, Demirba R, Aksoy N. The relation of serum paraoxonase-1 activity with isolated coronary artery ectasia: an observational study. Anadolu Kardiyol Derg 2012;12:307–12 [in Turkish].

- [4] Balta , Ozturk C. The main argument about the etiology of coronary artery ectasia: is it inflammation or not? Turk Kardiyol Dern Ars 2014;42:119–20.
- [5] Yilmaz H, Sayar N, Yilmaz M, Tangrek B, Cakmak N, Grkan U, et al.. Coronary artery ectasia: clinical and angiographical evaluation. Turk Kardiyol Dern Ars 2008;36:530–5 [in Turkish].
- [6] Zhang Y, Huang QJ, Li XL, Guo YL, Zhu CG, Wang XW, et al.. Prognostic value of coronary artery stenoses, markis class, and ectasia ratio in patients with coronary artery ectasia. Cardiology 2015;131:251–9.
- [7] Hoen PW, Whooley MA, Martens EJ, Na B, van Melle JP, de Jonge P. Differential associations between specific depressive symptoms and cardiovascular prognosis in patients with stable coronary heart disease. J Am Coll Cardiol 2010;56:838–44.
- [8] Ozturk S, Yalvac HD, Sivri N, Ozturk HM, Klc Y, Bulut E, et al.. Anxiety and depression scores in patients with coronary artery disease and coronary artery ectasia. Int J Cardiol 2015;186:299–301.