

## Apelin Levels in Patients with Coronary Artery Ectasia

Sevket Balta, MD, Cengiz Ozturk, MD, Mustafa Demir, MD, and Ali Osman Yildirim, MD

Department of Cardiology, Gulhane Medical Academy, Ankara, Turkey

To the Editor:

We read the article "Apelin Levels In Isolated Coronary Artery Ectasia" written by Bilik et al.<sup>1)</sup> The study aimed to determine the relationship between plasma apelin levels and isolated coronary artery ectasia. They concluded that patients with isolated coronary artery ectasia (CAE) have decreased plasma apelin levels compared with the control group.

CAE is well known as an atherosclerotic process. Angiographic criterion for definition of CAE, is the diameter of the ectatic segment, being at least 1.5 times larger compared to near the healthy segment.<sup>2)</sup> The CAE classification is widely used as a Markis model,<sup>3)</sup> which shows the severity of the disease pattern classified from Type 1 to Type IV. In this context, apelin levels are associated with inflammatory conditions in many disorders. However, in a recent study, the authors have not investigated the relation between apelin levels and the severity of CAE. Moreover, though the authors have mentioned that an intravascular ultrasound was not performed in patients in order to establish a diagnosis, it is important to accurately diagnose the real coronary artery disease. Furthermore, coronary angiograms should be evaluated by two independent, experienced clinicians who are unaware of the patients' clinical information in order to provide interobserver and intraobserver variability for coronary angiography in the recent study. Thus, these crucial factors should be evaluated in future studies.

**Received:** November 23, 2015

**Revision Received:** December 12, 2015

**Accepted:** December 17, 2015

**Correspondence:** Sevket Balta, MD, Department of Cardiology, Gulhane Medical Academy, Tevfik Saglam St., 06018 Etlik-Ankara, Turkey  
Tel: 90-312-3044281, Fax: 90-312-3044250  
E-mail: drsevketb@gmail.com

• The authors have no financial conflicts of interest.

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Apelin levels play important roles in cardiovascular functions and volume regulation, including vasodilation and protection of endothelium. Recently, it has been established that apelin levels may play a role in the pathogenesis of many diseases. Insufficient apelin levels were detected in many chronic illnesses, including diabetes mellitus, systemic lupus erythematosus, rheumatoid arthritis, multiple sclerosis, psoriasis, Behçet's disease, malignancy, autoimmune and infectious diseases. Furthermore, some drugs like antihypertensive treatment, including angiotensin-converting enzyme inhibitors, angiotensin receptor blocker, statins, anti-inflammatory drugs used may influence apelin levels.

In conclusion, apelin levels were lower in CAE patients when compared with controls as presented in the current study. However, the level of apelin can be affected by many conditions. Further studies will evaluate all of these conditions that can affect the results of clinical investigations.

### References

1. Bilik MZ, Kaplan İ, Yıldız A, et al. Apelin levels in isolated coronary artery ectasia. *Korean Circ J* 2015;45:386-90.
2. Demirkol S, Balta S, Celik T, et al. Carotid intima media thickness and its association with total bilirubin levels in patients with coronary artery ectasia. *Angiology* 2013 Jan 27. [Epub ahead of print]
3. Markis JE, Joffe CD, Cohn PF, Feen DJ, Herman MV, Gorlin R. Clinical significance of coronary artery ectasia. *Am J Cardiol* 1976;37:217-22.