Anatol J Cardiol 2016; 16: 364-8 Letters to the Editor

none of the patients underwent electrical cardioversion before the study recruitment. Finally, we agree with the comment that the data mentioned above should be stated in the text for precise evaluation of the disease- and the drug-related alterations in emotional status and quality of life.

Kevser Gülcihan Balcı Department of Cardiology, Türkiye Yüksek İhtisas Education and Research Hospital, Ankara-*Turkey* 

# References

- Balcı KG, Balcı MM, Canpolat U, Şen F, Akboğa MK, Süleymanoğlu M, et al. Comparison of health-related quality of life among patients using novel oral anticoagulants or warfarin for non-valvular atrial fibrillation. Anatol J Cardiol 2015 Jul 14. Epub ahead of print.
- Hallas J. Evidence of depression provoked by cardiovascular medication: A prescription sequence symmetry analysis. Epidemiology 1996; 7: 478-84. [Crossref]

Address for Correspondence: Dr. Kevser G. Balcı Park Flora Sitesi B Blok No:4 Yaşamkent Çay yolu, 06810, Ankara-*Türkiye* E-mail: kevs84@gmail.com

# Do spontaneous coronary artery dissections always need intervention in patients with no atherosclerosis?

To the Editor,

We have read the article entitled "Recurrent spontaneous dissection affecting different coronary arteries of a young female" written by Ermiş et al. (1) published in the February 2016; 16: 137-40 issue of the Anatol J Cardiol. It is a very demonstrative and interesting article. The authors have reported the case of a 31-year-old female with recurrent spontaneous coronary artery dissections in different coronary arteries, who underwent multiple stenting and coronary artery bypass grafting (CABG).

The authors of this study have noted that the pathogenesis of the coronary artery dissection is not completely well understood. Several factors such as trauma, idiopathic etiology, smoking, and emotional stress are usually responsible for the etiology of spontaneous coronary artery dissections. Further, there is a tear between the intima and media, resulting in a false lumen, which leads to the compression of the true lumen; this in turn leads to distal myocardial ischemia, infarction, or sudden death. These dissections may usually heal spontaneously without any intervention, particularly, in moderate- or small-sized coronary arteries. However, they may also occlude the true lumen and lead to an acute coronary syndrome that may require a percutaneous coronary intervention (PCI) (2-4). There are some reports

about the optimal treatment of spontaneous coronary artery dissections either by stenting and coronary artery bypass grafting or by conservative therapy (5-8).

In the present case report, the subject was a nonsmoker 31-year-old female with no typical chest pain and no atherosclerotic risk factors. There are some comments that need to be discussed. The authors noted that the electrocardiogram (ECG) showed an acute anterolateral myocardial infarction during admission; however, a figure of the ECG is absent. Further, coronary angiography revealed spontaneous dissection of the left anterior descending artery (LAD), involving a complete occlusion of the artery. There are some reports (9-10) regarding the spontaneous healing of the dissected arterial segments with conservative treatment, where a normal coronary flow may be restored. Coronary artery dissections in the mid and distal parts of the coronary vessels may be treated using a conservative approach. However, life-threatening and progressive dissections in the proximal part of the coronary vessels during the acute stage of the disease should be treated with PCI or CABG. It is important to decide which of the following treatments are best for treating spontaneous coronary artery dissections: angioplasty and stenting or conservative approach. Intravascular ultrasound (IVUS) and optic coherence tomography (OCT) are used to confirm the diagnosis of whether the condition is serious or not in the selected patients. IVUS or OCT could be useful in detecting intramural hematoma and relation of LAD and side branches in the presented case. On the other hand, PCI in coronary artery dissection may be associated with either failure of the procedure or complications with propagation of dissection that need to be treated with coronary stenting using a full metallic jacket covering of a long segment of the coronary artery or coronary bypass surgery. In the present case report, it can be considered that if a conservative treatment with heparin and nitroglycerin was administered for 24 or 48 h, the patient may not need multiple stenting or coronary artery bypass grafting surgery.

Cengiz Öztürk, Turgay Çelik, Şevket Balta, Atila İyisoy Department of Cardiology, Faculty of Medicine, Gülhane Military Medical Academy, Ankara-*Turkey* 

## References

- Ermiş N, Yaşar E, Cansel M. Recurrent spontaneous dissection affecting different coronary arteries of a young female. Anatol J Cardiol 2016; 16: 137-8. [Crossref]
- 2. Stępień-Wałek A, Wożakowska-Kapłon B. Spontaneous coronary artery dissection as a cause of acute coronary syndrome. Kardiol Pol 2015; 73: 787. [Crossref]
- Gowda RM, Sacchi TJ, Khan IA. Clinical perspectives of the primary spontaneous coronary artery dissection. Int J Cardiol 2005; 105: 334-6. [Crossref]
- Uribe CE, Ramirez-Barrera JD, Rubio C, Gallegos C, Ocampo LA, Saldarriaga C, et al. Spontaneous coronary artery dissection: Case series from two institutions with literature review. Anatol J Cardiol 2015; 15: 409-15. [Crossref]

366 Letters to the Editor Anatol J Cardiol 2016; 16: 364-8

- Tartan Z, Kaşıkçıoğlu H, Yapıcı F, Cam N. Spontaneous coronary artery dissection: a long-term follow-up. Anadolu Kardiyol Derg 2007; 7: 436-8.
- 6. Pierre-Justin G, Pierard LA. Spontaneous coronary artery dissection in an antilles man with acute inferior myocardial infarction. Int J Cardiol 2007; 118: 237-40. [Crossref]
- İyisoy A, Öztürk C, Arslan Z, Çelik T, Ünlü M, Cingöz F, et al. Progressive aortic dissection following RCA instent angioplasty. Int J Cardiol 2015; 187: 309-10. [Crossref]
- İyisoy A, Kurşaklıoğlu H, Köse S, Öztürk C, Amasyalı B, Demirtaş E. Spontaneous intimal dissection in a patient with post-infarct angina: identification with intravascular ultrasound and treatment with coronary stenting. Jpn Heart J 2003;44:557-64. [Crossref]
- Karabulut A, Tanriverdi S. Acute coronary syndrome secondary to spontaneous dissection of left internal mammary artery by-pass graft nine years after surgery. Kardiol Pol 2011; 69: 970-2.
- Öztürk C, Çelik T, Demirkol S, Demir M, Balta S, Ünlü M, et al. The healing of spontaneous coronary artery dissection with conservative treatment: When to stop. Int J Cardiol 2015; 189: 249-51.
- Öztürk C, Yıldırım AO, Demir M, Haqmal H, Balta S, Ünlü M, et al. The spontaneous coronary artery dissection may need intervention in the proximal segment of the arteries. Int J Cardiol 2016; 202: 943-4.

Address for Correspondence: Dr. Cengiz Öztürk GATA Kardiyoloji Bölümü, Tevfik Sağlam Cad. 06018 Etlik, Ankara-*Türkiye* Phone: +90 312 304 42 64 Fax: +90 312 304 42 50

E-mail: drcengizozturk@yahoo.com.tr

©Copyright 2016 by Turkish Society of Cardiology - Available online at www.anatoljcardiol.com

DOI:10.14744/AnatolJCardiol.2016.7120



# Author's Reply

To the Editor,

We are pleased by the author's (1) interest in our case report entitled "Recurrent spontaneous dissection affecting different coronary arteries of a young female" published in the February 2016 issue (16: 137-40) of Anatol J Cardiol.

The authors proposed that medical treatment may be an option for this case because of spontaneous healing potential of the coronary artery dissection and its recurrent nature. However, it should be accepted that there is no guideline-directed treatment and diagnostic algorithm for spontaneous coronary artery dissection. In large case series, conservative treatment is the preferred strategy for stable patients without ongoing ischemia and if the involved arteries are small or medium sized. Patients with ongoing chest pain, ST elevation, or hemodynamic instability should undergo PCI, particularly when the dissection affects major arteries supplying large areas of the myocardium (2–5). An emergency coronary artery bypass grafting (CABG) should be considered if the dissection extends from the left main into the left anterior descending artery (LAD) and circumflex arteries.

In our case, as shown in the first figure, there is a TIMI 0 flow in LAD after the first septal branch. We first performed PCI to relieve the ongoing ischemia and reduce the infarct size. In the

second episode, the patient suffered acute pulmonary edema treated with initial medical treatment; however, repeat angiogram showed persistent flow-limiting lesion, possibly caused by the intramural hematoma. Because of the life-threatening nature of this condition and hemodynamic instability, we were forced to consider the patient for CABG. In the third episode, the reason behind choosing PCI was the patient's severe ischemia that was unresponsive to medical treatment and compromised hemodynamics, with TIMI I–II flow in the right coronary artery.

Moreover, we accept the role of adjunctive intracoronary imaging, such as optical coherence tomography (OCT) and intravascular ultrasound (IVUS), particularly in diagnosing SCAD subtypes, intramural hematoma, and localizing side branch/true lumen for the intervention (6). However, because of lack of IVUS or OCT facilities in our laboratory at that time, we could not use these techniques.

#### **Necip Ermis**

Department of Cardiology, İnönü Üniversity, Turgut Özal Medical Center, Malatya-*Turkey* 

## References

- Ermiş N, Yaşar E, Cansel M. Recurrent spontaneous dissection affecting different coronary arteries of a young female. Anatol J Cardiol 2016; 16: 137-8. [Crossref]
- Saw J. Spontaneous coronary artery dissection. Can J Cardiol 2013; 29: 1027-33. [Crossref]
- Alfonso F, Bastante T, Cuesta J, Rodríguez D, Benedicto A, Rivero F. Spontaneous coronary artery dissection: novel insights on diagnosis and management. Cardiovasc Diagn Ther 2015; 5: 133-40.
- Kansara P, Graham S. spontaneous coronary artery dissection: case series with extended follow up. J Invasive Cardiol 2011; 23: 76-80.
- Tweet MS, Eleid MF, Best PJ, Lennon RJ, Lerman A, Rihal CS, et al. Spontaneous coronary artery dissection: revascularization versus conservative therapy. Circ Cardiovasc Interv 2014; 7: 777-86
- Jinnouchi H, Sakakura K, Matsuda J, Wakabayashi Y, Wada H, Momomura S, et al. Recurrent spontaneous coronary artery dissection observed with multiple imaging modalities. Int Heart J 2013; 54: 181-3.

Address for Correspondence: Dr. Necip Ermiş İnönü Üniversitesi Turgut Özal Tıp Merkezi, Kardiyoloji Bölümü, 44280 Malatya-*Türkiye* 

Phone: +90 422 3410660/4508 E-mail: necipermis@yahoo.com

# Effects of cardiopulmonary bypass on new-onset atrial fibrillation

To the Editor,

We read the article titled "SYNTAX score predicts postoperative atrial fibrillation in patients undergoing on-pump isolated coronary artery bypass grafting surgery" that is published in Anatolian J Cardiol October 18. Epub ahead of print (1), in which the authors described the effects of SYNTAX score on postoper-