Psychological effects of treatment with novel oral anticoagulants in non-valvular atrial fibrillation patients

To the Editor,

I have read with great interest the article entitled "Comparison of health-related quality of life among patients using novel oral anticoagulants or warfarin for non-valvular atrial fibrillation," published online in Anatol J Cardiol 2015 Jul 14. (Epub ahead of print) by Balcı et al. (1). In their study, the authors reported that warfarin-treated patients had higher levels of self-reported symptoms of depression and anxiety and compromised health-related quality of life compared with novel oral anticoagulant (NOAC)-treated patients. I have the following comments and concerns:

In previous studies, it has been reported that the quality of life was significantly reduced in atrial fibrillation patients compared with that of healthy subjects (2). Therefore, the authors should state if there was any difference between the two groups in terms of atrial fibrillation duration at the beginning of the study. In addition, many cardiovascular drugs have been reported to cause depression and anxiety. In a study by Rathman et al. (3), it has been demonstrated that prescription of calcium channel blockers and beta-blockers, which are widely used for rate control in atrial fibrillation patients, can increase the risk of depression in diabetic patients. I was wondering if there was any difference between warfarin-treated patients and NOAC-treated patients in terms of using these cardiovascular medications.

Furthermore, it is well established that the risk of atrial fibrillation is closely associated with thyroid activity, and the prevalence of thyroid dysfunction in patients with atrial fibrillation was in the range of 0%–24% (4, 5). In addition, it has been shown that thyroid dysfunction itself may impair the quality of life and cause psychological symptoms. Therefore, I think that patients with hyperthyroidism and hypothyroidism should be excluded from the study.

Finally, electrical cardioversion can cause psychological discomfort in atrial fibrillation patients. Is there any attempted cardioversion procedure in the last month before beginning the study and is there any difference between two groups in terms of attempted cardioversion procedure? It would be helpful if the authors provided this information.

In conclusion, despite the aforementioned limitations, NOAC therapy seems to be psychologically better accepted than warfarin therapy in non-valvular atrial fibrillation patients.

Can Ramazan Öncel
Department of Cardiology, Atatürk State Hospital, Antalya-*Turkey*

References

1. 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.
2. Dorian P, Jung W, Newman D, Paquette M, Wood K, Ayers GM, et al. The impairment of health-related quality of life in patients with intermittent atrial fibrillation: implications for the assessment of investigational therapy. J Am Coll Cardiol 2000; 36: 1303-9. [Crossref]
3. Rathmann W, Haastert B, Roseman JM, Giani G. Cardiovascular drug prescriptions and risk of depression in diabetic patients. J Clin Epidemiol 1999; 52: 1103-9. [Crossref]
4. Siebers MJ, Drinka PJ, Vergauwen C. Hyperthyroidism as a cause of atrial fibrillation in long-term care. Arch Intern Med 1992; 152: 2063-4. [Crossref]
5. Cobler JL, Williams ME, Greenland P. Thyrotoxicosis in institutionalized elderly patients with atrial fibrillation. Arch Intern Med 1984; 144: 1758-60. [Crossref]

Address for Correspondence: Dr. Can Ramazan Öncel
Atatürk Devlet Hastanesi Kardiyoloji Bölümü,
Anafartalar Cad., 07040 Antalya-*Türkiye*
E-mail: r_oncel@hotmail.com
©Copyright 2016 by Turkish Society of Cardiology - Available online at www.anatoljcardiol.com
DOI:10.14744/AnatolJCardiol.2016.7030

Author`s Reply

To the Editor,

We thank the authors of the letter for their valuable comments. In our study entitled "Comparison of health-related quality of life among patients using novel oral anticoagulants or warfarin for non-valvular atrial fibrillation," published online in Anatol J Cardiol 2015 Jul 14. (Epub ahead of print), we mainly focused on the oral anticoagulant-type-related difference in the quality of life and emotional status (1). Although, many widely used treatments in cardiology may have effects on the psychological condition (2), our study did not reveal any significant difference between novel oral anticoagulant (NOAC) and warfarin users because of the prescriptions of calcium channel blockers (NOAC 47.5% vs. warfarin 44%, p=0.655) and beta-blockers (NOAC 89% vs. warfarin 83.5%, p=0.282). In addition, patients with known thyroid dysfunction were already excluded from the study because of the potential coexistence of depression and anxiety as well as the impaired quality of life in such population. When the patients were evaluated according to the atrial fibrillation (AF) duration, the median AF duration did not significantly differ between the study groups [warfarin 36 (21–56) months vs. NOAC 34 (20–60) months, p=0.153]. Although, in the beginning, we did not assess the patients according to the presence of prior electrical cardioversion, additional analyses showed that

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

1. 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.
2. 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

1. 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]
3. Gowda RM, Sacchi TJ, Khan IA. Clinical perspectives of the primary spontaneous coronary artery dissection. Int J Cardiol 2005; 105: 334-6. [Crossref]
4. 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]