
Effects of colchicine on cardiac functions

To the Editor,

We have read with great interest the article published by Hidayet et al. (1), which was regarding the effects of Behçet's disease (BD) on cardiac repolarization. It is emphasized in the study that Tp-e interval and Tp-e/QT and Tp-e/QTc ratios were

prolonged in patients with BD compared with those in healthy controls, and it was demonstrated that the Tp-e/QTc ratio was correlated with the disease duration (1).

Oral aphthous ulcer and skin lesions including acneiform lesions, papulopustular lesions, and erythema nodosum are characteristic manifestations of BD. Colchicine inhibits microtubule function and decreases inflammation by impairing neutrophil chemotaxis (2). Colchicine is used in mucocutaneous manifestations of BD. It is especially effective for the treatment of oral ulcers and erythema nodosum (3). Colchicine shows some beneficial and unfavorable effects on cardiac functions. It is used in the treatment of pericarditis, and colchicine treatment is associated with significantly less recurrence following atrial fibrillation ablation (4). Frommeyer et al. (5) showed in rabbits that although colchicine had no effects on the QT interval and dispersion, effective refractory period was decreased dose dependently following colchicine infusion, indicating the significantly elevated inducibility of ventricular fibrillation (5). It is underscored in another study that colchicine treatment distinctly decreased the Tp-e and Tp-e/QT values by the end of a 1-year treatment in patients with familial Mediterranean fever (6).

In conclusion, colchicine is a mainstay of treatment in BD and has several effects on cardiac functions. In the current study, there is not any statement about the effects of colchicine on cardiac repolarization. We think that it would have been better if the comparison of ECG findings between patients with and without colchicine treatment was performed.

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References

1. Hidayet Ş, Demir V, Turan Y, Gürel G, Taşolar MH. Evaluation of Tp-e interval, Tp-e/QT ratio, and Tp-e/QTc ratio in patients with Behçet's disease. *Anatol J Cardiol* 2019; 22: 85-90.
2. Lin P, Liang G. Behçet disease: recommendation for clinical management of mucocutaneous lesions. *J Clin Rheumatol* 2006; 12: 282-6.
3. Scherrer MAR, Rocha VB, Garcia LC. Behçet's disease: review with emphasis on dermatological aspects. *An Bras Dermatol* 2017; 92: 452-64.
4. Deftereos S, Giannopoulos G, Kossyvakis C, Efremidis M, Panagopoulou V, Kaoukis A, et al. Colchicine for prevention of early atrial fibrillation recurrence after pulmonary vein isolation: a randomized controlled study. *J Am Coll Cardiol* 2012; 60: 1790-6.
5. Frommeyer G, Krawczyk J, Dechering DG, Kochhäuser S, Leitz P, Fehr M, et al. Colchicine Increases Ventricular Vulnerability in an Experimental Whole-Heart Model. *Basic Clin Pharmacol Toxicol* 2017; 120: 505-8.
6. Ocal AG, Ocal L, Kup A, Eren H, Tezcan ME. Colchicine's Effects on Electrocardiographic Parameters in Newly Diagnosed Familial