Address for Correspondence: Dr. Berhan Keskin, Kartal Koşuyolu Yüksek İhtisas Eğitim ve Araştırma Hastanesi, Kardiyoloji Bölümü, Cevizli Mah. Denizer Cad. İstanbul-*Türkiye* Phone: +90 537 977 67 36 E-mail: bekeskin@ku.edu.tr ©Copyright 2018 by Turkish Society of Cardiology - Available online

at www.anatoljcardiol.com DOI:10.14744/AnatolJCardiol.2018.27164

Author`s Reply

To the Editor,

A review of the literature regarding the QTc values of patients in the control group revealed the following observations: Trolle et al.'s (1) study had a control group with a mean age of 38.9±12.4 years, with mean QTc values of 389.1±20.1; Demirol et al.'s (2) study had a control group with a mean age of 12±3.5 years, with mean QTc values of 390±25.1; Olivares López et al.'s (3) study had a control group with a mean age 11.45±2.58 years, with mean QTc values of 391.73±17.7; Ergul et al.'s (4) study had a control group with a mean age of 4.3 (6 days-16 years) years, with mean QTc values of 385±58; Küçük et al.'s (5) study had a control group with a mean age of 60 years, with mean QTc values of 384±43.2; Braschi et al.'s (6) study, which shows reference ranges for non-invasive ventricular repolarization parameters for various patients, had 3 groups: group 1-child (1 day-11 years), group 2-adolescent (12-19 years), group 3-adult (20-64 years). Group 1 had a mean QTc value of 401.7±25, group 2 401.9±21.3, and group 3 407.3±19.8; Akin et al.'s (7) study had a control group with a mean age of 8.8±2.4 years, with min QTc of 371.3±24.7 and max QTc of 411.33±24.6; Ogawa et al.'s (8) study in Japan entitled "The Maximum QTc of Holter Electrocardiography in a Pediatric Population" had a QTc value of 380 (368–390) for 10–12-year-old girls and 397 (380–410) for 13–15-year-old girls; and Krasemann et al. (9) had 7 groups in their study entitled "Changes of the corrected QT interval in healthy boys and girls over day and night," wherein the sixth group with patients aged 12-16 years had a QTc value of 400±20.

Our control group with patients aged 13.17±2.85 years had a mean QTc value of 392.06±13.21, which is not different from those in the 9 studies mentioned above but clearly different from the Brazilian study. Regional factors may be the cause of this difference; therefore, everyone including us use control groups of same population we studied. We indicated that our study population was small and that studies with a larger population are necessary along with the other limitations in the study limitations section.

Our study did not evaluate mortality, and our results indicate the differences only between the study and control groups. Because QTc prolongation can cause sudden and we did find longer QTc in our study population, we only mention that the increased QTc may cause harm and to confide in that we suggested further investigation. 🕩 Adem Atıcı, 🕩 Cafer Panc¹, 🕩 Ekrem Bilal Karaayvaz², 🕩 Ahmet Demirkıran³. 🕩 Orkide Kutlu4. 🕩 Kamber Kasalı^s. 🕩 Elmas Kekec^e, 💿 Lütfullah Sarı^e, 💿 Zevnep Nur Akvol Sarı^e, Ahmet Kava Bilge⁷ Department of Cardiology, Mus State Hospital; Mus-Turkey ¹Department of Cardiology, Mehmet Akif Ersoy Training and Research Hospital; İstanbul-Turkey ²Department of Cardiology, Bağcılar Training and Research Hospital; İstanbul-Turkey ³Department of Cardiology, VU University Medical Center; Amsterdam-The Netherlands ⁴Department of Internal Medicine, Okmeydanı Training and Research Hospital; İstanbul-Turkey ⁵Department of Biostatistics, Atatürk University: Erzurum-*Turkev* ⁶İstanbul University İstanbul Faculty of Medicine; İstanbul-*Turkey* ⁷Department of Cardiology, İstanbul University İstanbul Faculty of Medicine; İstanbul-Turkey

References

- 1. Trolle C, Mortensen KH, Pedersen LN, Berglund A, Jensen HK, Andersen NH, et al. Long QT interval in Turner syndrome--a high prevalence of LQTS gene mutations. PLoS One 2013; 8: e69614.
- Demirol M, Karadeniz C, Ozdemir R, Coban S, Katipoglu N, Yozgat Y, et al. Prolonged Tp-e Interval and Tp-e/QT Ratio in Children with Mitral Valve Prolapse. Pediatr Cardiol 2016; 37: 1169-74. [CrossRef]
- Olivares López JL, Vázquez Olivares M, Fleta Zaragozano J, Moreno Aznar LA, Bueno Sánchez M. Electrocardiographic and echocardiographic findings in children with overweight and obesity. Med Clin (Barc) 2005; 125: 93-4. [CrossRef]
- Ergul Y, Nisli K, Varkal MA, Oner N, Dursun M, Dindar A, et al. Electrocardiographic findings at initial diagnosis in children with isolated left ventricular noncompaction. Ann Noninvasive Electrocardiol 2011; 16: 184-91. [CrossRef]
- 5. Küçük M, Karadeniz C, Ozdemir R, Meşe T. Prolonged T-wave peakend interval in Down syndrome patients with congenitally normal hearts. Pediatr Int 2018; 60: 513-6. [CrossRef]
- 6. Braschi A, Abrignani MG, Francavilla VC, Abrignani V, Francavilla G. Age- and sex-based reference ranges for non-invasive ventricular repolarisation parameters. Int J Clin Pract 2017; 71 (5). [CrossRef]
- Akın A, Unal E, Yıldırım R, Ture M, Balık H, Haspolat YK. Evaluation of QT dispersion and Tp-e interval in children with subclinical hypothyroidism. Pacing Clin Electrophysiol 2018; 41: 372-5. [CrossRef]
- 8. Ogawa Y, Tanaka T, Kido S. Maximum QTc on Holter electrocardiography in children. Pediatr Int 2018; 60: 507-12. [CrossRef]
- 9. Krasemann T, Strompen C, Blumenberg J, Gehrmann J, Burkhardtsmaier G, Vogt J. Changes of the corrected QT interval in healthy boys and girls over day and night. Eur Heart J 2009; 30: 202-8. [CrossRef]

Address for Correspondence: Dr. Ekrem Bilal Karaayvaz,

Bağcılar Eğitim ve Araştırma Hastanesi, Kardiyoloji Kliniği, Merkez Mah., Dr. Sadık Ahmet Caddesi, Bağcılar 34200 İstanbul-*Türkiye* Phone: +90 538 975 56 35 E-mail: ekrembilal@gmail.com ©Copyright 2018 by Turkish Society of Cardiology - Available online at www.anatoljcardiol.com

