

# The Anatolian Journal of Cardiology

Anatol J Cardiol • Volume 22 • Issue 1 • July 2019

## Editor-in-Chief

Çetin Erol

## Editor

Mustafa Kılıçkap

## Advisory Board of This Issue

Burak Açar  
 Mehmet Ağırbaşı  
 Ümit Özgür Akdemir  
 Alper Akın  
 Ömer Akyürek  
 Hamiyet Dönmez Altuntaş  
 Alpay Arıbaş  
 Yüksel Atay  
 Tayfun Aybek  
 Saide Aytekin  
 Ali Baykan  
 Oben Baysan  
 Yüksel Çavuşoğlu  
 İrem Dinçer  
 Hüseyin Ede  
 Yakup Ergül  
 Zeynep Eyileten  
 Saeed Farzanehfar  
 Yoshihiro Fukumoto  
 Ozan Mustafa Gürsoy  
 Cemşit Karakurt  
 Ümit Kervan  
 Serhat Koca  
 Alparslan Kurtul  
 Kaan Okyay  
 Ersel Onrat  
 Evren Özçınar  
 Alev Arat Özkan  
 Hakan Hüseyin Poyrazoğlu  
 Bilge Volkan Salancı  
 Alessandro Sciahbasi  
 Alpay Turan Sezgin  
 Çiğdem Soydal  
 Nehir Sucu  
 Erhan Tenekecioğlu  
 Abdullah Tunçez  
 Fatih Yalçın  
 Kıvanç Yalın  
 Çağrı Yayla  
 Ayşe Yıldırım  
 Zerrin Yılmaz

## Invited Review

How much salt is too much salt?

Franz H. Messerli et al.; Bern-Switzerland

## Original Investigations

Is trans-radial approach related to an increased risk of radiation exposure in patients who underwent diagnostic coronary angiography or percutaneous coronary intervention? (The SAKARYA study)

Çağın Mustafa Üreyen et al.; Antalya-Turkey

Accuracy of three-dimensional systolic dyssynchrony and sphericity indexes for identifying early left ventricular remodeling after acute myocardial infarction

Arnas Karuzas et al.; Kaunas-Lithuania

Ross operation early and mid-term results in children and young adults

Oktay Korun et al.; Istanbul-Turkey

Timing and magnitude of regional right ventricular function and their relationship with early hospital mortality in patients with acute pulmonary embolism

Batur Gönenç Kanar et al.; Istanbul-Turkey

Anthropometric indices predicting incident hypertension in an Iranian population: The Isfahan cohort study

Masoumeh Sadeghi et al.; Isfahan-Iran

## Scientific Letter

Papaverine use for radial artery sheath entrapment

Alessandro Sciahbasi et al.; Rome-Italy

## Case Reports

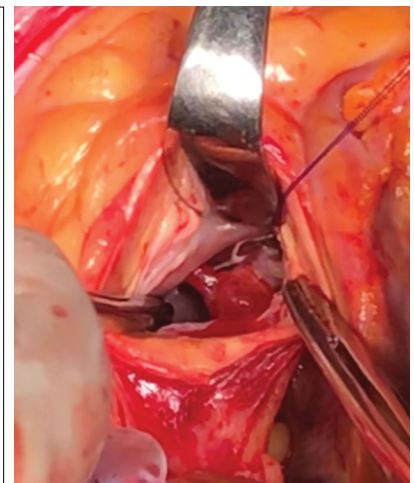
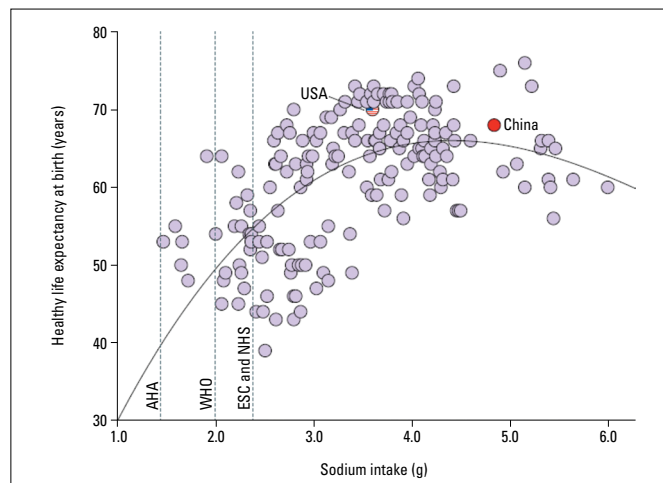
Temporary left ventricular assist device for complete recovery from reversible acute heart failure due to tumor necrosis factor- $\alpha$  inhibitor

Marie-Camille Soucy-Giguere et al.; Quebec-Canada

A rare complication of posterior myocardial infarction: Anterolateral papillary muscle rupture

Ahmet Karaduman et al.; Istanbul-Turkey

Page: E-1



**Editor-in-Chief**Prof. Dr. Çetin Erol, *Ankara, Turkey***Editor**Mustafa Kılıçkap, *Ankara, Turkey***Associate Editors**

Adnan Abacı, *Ankara, Turkey*  
 Rüçhan Akar, *Ankara, Turkey*  
 Bülent Behlül Altunkeser, *Konya, Turkey*  
 Serdal Arslan, *Sivas, Turkey*  
 Ahmet Kaya Bilge, *İstanbul, Turkey*  
 Hakim Çelik, *Şanlıurfa, Turkey*  
 Recep Demirbağ, *Şanlıurfa, Turkey*  
 Ş. Remzi Erdem, *Ankara, Turkey*  
 İlkey Erdoğan, *Ankara, Turkey*  
 Sadi Güleç, *Ankara, Turkey*  
 Ali Gürbüz, *İzmir, Turkey*  
 Serdar Kula, *Ankara, Turkey*

Selma Metintaş, *Eskişehir, Turkey*  
 Kurtuluş Özdemir, *Konya, Turkey*  
 Murat Özeren, *Mersin, Turkey*  
 Leyla Elif Sade, *Ankara, Turkey*  
 Asife Şahinarslan, *Ankara, Turkey*  
 Ahmet Temizhan, *Ankara, Turkey*  
 Ercan Tutar, *Ankara, Turkey*  
 Omaç Tüfekçioğlu, *Ankara, Turkey*  
 F. Ajlan Tükün, *Ankara, Turkey*  
 Taner Ulus, *Eskişehir, Turkey*  
 Aylin Yıldırım, *Ankara, Turkey*  
 Mehmet Birhan Yılmaz, *İzmir, Turkey*

**Editor-in-Chief Consultant**  
 Suna Kıraç, *Lefkoşe, KKTC*

**Senior Consultant in Biostatistics**  
 Kazım Özdamar, *Eskişehir, Turkey*

**Consultant in Biostatistics**  
 Fezan Mutlu, *Eskişehir, Turkey*

**Previous Editor-in-Chief**Bilgin Timuralp, *Eskişehir, Turkey***Editorial Board**

Ramazan Akdemir, *Sakarya, Turkey*  
 Levent Akyürek, *Göteborg, Sweden*  
 Azin Alizadehasl, *Tehran, Iran*  
 Necmi Ata, *Eskişehir, Turkey*  
 Saide Aytekin, *İstanbul, Turkey*  
 Vedat Aytekin, *İstanbul, Turkey*  
 Ljuba Bacharova, *Bratislava, Slovak Republic*  
 Luigi P. Badano, *Udine, Italy*  
 Anzel Bahadır, *Düzce, Turkey*  
 Adrian Baranchuk, *Kingston, Ontario, Canada*  
 Murat Biteker, *Muğla, Turkey*  
 Eugene Braunwald, *Boston, MA, USA*  
 Cahid Civelek, *St. Louis, MO, USA*  
 Ali Emin Denктаş, *Houston, TX, USA*  
 Polychronis Dilaveris, *Athens, Greece*  
 Firat Duru, *Zurich, Switzerland*

Ertuğrul Ercan, *İzmir, Turkey*  
 Okan Erdoğan, *İstanbul, Turkey*  
 Özcan Erel, *Ankara, Turkey*  
 Ali Gholamrezanezhad, *Tehran, Iran*  
 Michael Gibson, *Boston, MA, USA*  
 Orhan Gökbalp, *İzmir, Turkey*  
 Bülent Görenek, *Eskişehir, Turkey*  
 Okan Gülel, *Samsun, Turkey*  
 Sema Güneri, *İzmir, Turkey*  
 Yekta Gürlertop, *Edirne, Turkey*  
 Murat Güvener, *Ankara, Turkey*  
 Cemil İzgi, *London, UK*  
 Diwakar Jain, *Philadelphia, USA*  
 Erdem Kaşıkçioğlu, *İstanbul, Turkey*  
 Cihançir Kaymaz, *İstanbul, Turkey*  
 Mustafa Kılıç, *Denizli, Turkey*

Serdar Küçüköğlü, *İstanbul, Turkey*  
 Peter Macfarlane, *Renfrewshire, Scotland*  
 Robert W. Mahley, *San Francisco, CA, USA*  
 Giuseppe Mancina, *Milan, Italy*  
 G.B. John Mancini, *Vancouver BC, Canada*  
 Anthony De Maria, *San Diego, CA, USA*  
 Pascal Meier, *London, UK*  
 Franz H. Messerli, *New York, USA*  
 Sanem Nalbantgil, *İzmir, Turkey*  
 Navin C. Nanda, *Birmingham, AL, USA*  
 Yılmaz Nişancı, *İstanbul, Turkey*  
 Hakan Oral, *Ann Arbor, MI, USA*  
 Necla Özer, *Ankara, Turkey*  
 Zeki Öngen, *İstanbul, Turkey*  
 Mehmet Özkan, *İstanbul, Turkey*  
 Sotirios N. Prapas, *Athens, Greece*

Fausto J. Pinto, *Lisbon, Portugal*  
 Vedat Sansoy, *İstanbul, Turkey*  
 Raşit Sayın, *Trabzon, Turkey*  
 Mark V. Sherrid, *New York, USA*  
 Horst Sievert, *Frankfurt, Germany*  
 İlke Sipahi, *İstanbul, Turkey*  
 Richard Sutton, *Monaco, Monaco*  
 Ahmet Şaşmaz, *İstanbul, Turkey*  
 S. Lale Tokgözoğlu, *Ankara, Turkey*  
 Murat Tuzcu, *Cleveland, OH, USA*  
 Dilek Ural, *İstanbul, Turkey*  
 Ahmet Ünalır, *Eskişehir, Turkey*  
 Selma Arzu Vardar, *Edirne, Turkey*  
 Mehmet Yokuşoğlu, *Ankara, Turkey*  
 Jose L. Zamorano, *Madrid, Spain*  
 Wojciech Zareba, *New York, USA*  
 Yuqing Zhang, *Beijing, China*



**TURKISH  
 SOCIETY OF  
 CARDIOLOGY**

**The Owner on behalf of  
 the Turkish Society of Cardiology**

**Türk Kardiyoloji Derneği adına  
 İmtiyaz Sahibi**

Mustafa Kemal EROL

Address : Nish İstanbul A Blok Kat: 8, No: 47-48  
 Çobançesme Sanayi Cad. No: 11  
 Yenibosna, Bahçelievler 34196  
 İstanbul, Türkiye

Phone : +90 212 221 1730-38  
 Fax : +90 212 221 1754  
 E-mail : tkd@tkd.org.tr  
 Web : www.tkd.org.tr

**Editor-in-Chief Office**

Phone : +90 (535) 461 41 62  
 Fax : +90 (212) 221 17 54  
 E-mail : info@anatoljcardiol.com

**Assistants to the Editor-in-Chief**

Ebru BOZ  
 Elif SÖNMEZ



Publisher: Kare Yayıncılık (Kare Publishing)

Concord İstanbul Dumlupınar Mah. Yumurtacı Abdi Bey  
 Cad. Cihan Sok. No: 15, B Blok Da: 162 Kat: 21, Kadıköy,  
 İstanbul, TURKEY

Phone: +90 216 550 61 11

Fax: +90 216 550 61 12

http://www.kareyayincilik.com

E-mail: kareyayincilik@gmail.com

Yayın Türü: Uluslararası Süreli, Basım Tarihi: Temmuz 2019  
 Basım: Filmevi Grafik Renk Ayrımı Sistemleri San.  
 Tic. LTD. ŞTİ. İstanbul-Türkiye

**CONTENTS****EDITORIAL**

- Important news about salt consumption from Prof. Messerli  
Çetin Erol; Ankara-*Turkey* 1

**INVITED REVIEW**

- How much salt is too much salt?  
Franz H. Messerli, Alexandra Neagoe, Belinda Nazan Walpoth; Bern-*Switzerland* 2

**ORIGINAL INVESTIGATIONS**


- Is trans-radial approach related to an increased risk of radiation exposure in patients who underwent diagnostic coronary angiography or percutaneous coronary intervention? (The SAKARYA study)  
Çağın Mustafa Üreyen, Kahraman Coşansu, Mustafa Gökhan Vural, Sait Emir Şahin, İbrahim Kocayığıt, Mustafa Türker Pabuccu, Muhammed Necati Murat Aksoy, Mustafa Tarık Ağaç, Ersan Tatlı, Hüseyin Gündüz, Ramazan Akdemir; Antalya, Sakarya, İstanbul-*Turkey* 5
- Accuracy of three-dimensional systolic dyssynchrony and sphericity indexes for identifying early left ventricular remodeling after acute myocardial infarction  
Arnas Karuzas, Egle Rumbinaite, Dovydas Verikas, Tomas Ptasinskas, Gintare Muckiene, Egle Kazakauskaite, Vytautas Zabiela, Renaldas Jurkevicius, Jolanta Justina Vaskelyte, Remigijus Zaliunas, Diana Zaliaduonyte-Peksiene; Kaunas-*Lithuania* 13
- Ross operation early and mid-term results in children and young adults  
Oktay Korun, Arif Selçuk, Okan Yurdakök, Hüsnü Fırat Altın, Murat Çiçek, Yiğit Kılıç, Şefika Türkan Kudsioğlu, Mustafa Orhan Bulut, Numan Ali Aydemir, Ahmet Şaşmazel; İstanbul-*Turkey* 21
- Timing and magnitude of regional right ventricular function and their relationship with early hospital mortality in patients with acute pulmonary embolism  
Batur Gönenç Kanar, Anıl Şahin, Gökhan Göl, Erhan Oğur, Murat Kavas, Halil Ataş, Bülent Mutlu; İstanbul-*Turkey* 26
- Anthropometric indices predicting incident hypertension in an Iranian population: The Isfahan cohort study  
Masoumeh Sadeghi, Mohammad Talaei, Mojgan Gharipour, Shahram Oveisgharan, Pouya Nezafati, Minoo Dianatkah, Nizal Sarrafzadegan; Isfahan, Tehran-*Iran, Singapore* 33

**SCIENTIFIC LETTER**


- Papaverine use for radial artery sheath entrapment  
Alessandro Sciahbasi, Andrea Cuono, Alberto Marrangoni, Stefano Rigattieri; Rome, L'Aquila-*Italy* 44

## CONTENTS

### CASE REPORTS

- ▶ Temporary left ventricular assist device for complete recovery from reversible acute heart failure due to tumor necrosis factor- $\alpha$  inhibitor 46  
Marie-Camille Soucy-Giguere, Éric Charbonneau, Alexandre Cinq Mars, Michelle Dubois, Mario Sénéchal; Quebec-*Canada*
- ▶ A rare complication of posterior myocardial infarction: Anterolateral papillary muscle rupture  48  
Ahmet Karaduman, İsmail Balaban, Berhan Keskin, Çetin Geçmen, Gökhan Kahveci; İstanbul-*Turkey*

### E-PAGE ORIGINAL IMAGES

- ▶ Left ventricular myxoma: Hard to see, hard to hunt E-1  
Bárbara Segura, Gregorio Laguna, Kenia Álvarez, Gemma Pastor, Yolanda Carrascal; Valladolid-*Spain*
- ▶ Cardiac metastasis mimicking acute ST-elevation myocardial infarction  E-1  
Muhammed Said Beşler, Uğur Canpolat; Ankara-*Turkey*