9

15

8

14

10

16

### Kaynaklar

- Guidelines for the management of atrial fibrillation: the Task Force for the Management of Atrial Fibrillation of the European Society of Cardiology (ESC). Eur Heart J 2010; 31: 2369-429. [CrossRef]
- Warfarin versus aspirin for prevention of thromboembolism in atrial fibrillation: Stroke Prevention in Atrial Fibrillation II Study. Lancet 1994; 343: 687-91.
- Rockson SG, Albers GW. Comparing the guidelines: anticoagulation therapy to optimize stroke prevention in patients with atrial fibrillation. J Am Coll Cardiol 2004; 43: 929-35. [CrossRef]
- Ertaş F, Duygu H, Acet H, Eren NK, Nazlı C, Ergene AO, et al. Oral anticoagulant use in patients with atrial fibrillation. Turk Kardiyol Dern Ars 2009; 3: 161-7.
- Kaya H, Ertaş F, Kaya Z, Kahya Eren N, Yüksel M, Köroğlu B, et al. Epidemiology, anticoagulant treatment and risk of thromboembolism in patients with valvular atrial fibrillation: Results from Atrial Fibrillation in Turkey: Epidemiologic Registry (AFTER). Cardiol J 2013; 4: 447-52.

Yazışma Adresi/Address for Correspondence: Dr. Faruk Ertaş Dicle Üniversitesi Tıp Fakültesi, Kardiyoloji Anabilim Dalı, Diyarbakır-*Türkiye* Tel:+90 553 394 10 31

Faks:+90 412 248 85 23

E-posta: farukertas@hotmail.com



© Telif Hakkı 2013 AVES Yayıncılık Ltd. Şti. - Makale metnine www.anakarder.com web sayfasından ulaşılabilir.

© Copyright 2013 by AVES Yayıncılık Ltd. - Available online at www.anakarder.com doi:10.5152/akd.2013.247



3

Male

Female

5: Syncone, Paced VVI. Deceaser

11: Syncope, Paced DDD-R

12: Asymptomatic, Holter SSS + (Sirus bradycardia min heart rate. 21/min sirus pause >3 sec, and tachycardia-bradycardia episode

13: Asymptomatic, Holter SSS + (Sirus bradycardia min heart rate. 35/min sirus pause <3 sec, and tachycardia-bradycardia episode

5

6

Affected Male

Affected Female

4

#### Figure 1. Detailed family pedigree tree

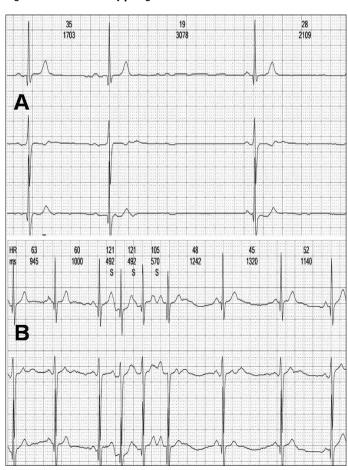


Figure 2. A) A sinus pause episode, B) A tachycardy-bradycardy episode

## Familial sick sinus syndrome

#### Ailesel hasta sinüs sendromu

To the Editor,

We put the diagnosis of the sick sinus syndrome (SSS) in an asymptomatic (no history of dizziness, syncope) 31-year-old patient who have a 39-year-old sister diagnosed with SSS and implanted DDD-R pacemaker, as well as two children with SSS. The family members who were not affected had no symptoms and they have been checked with Holter monitoring. Figure 1 reveals detailed family pedigree. The patient had normal echocardiogram, a minimum heart rate less than 30 bpm on 24-hour electrocardiography (ECG), sinus pause episode more than 3 seconds, and tachycardia-bradycardia episodes (Fig. 2).

The SSS is a syndrome encompassing a variety of sinus nodal abnormalities. The most common clinical manifestations are syncope, presyncope, dizziness, and fatigue. Electrocardiogram typically shows sinus bradycardia, sinus arrest, and/or sinoatrial block. Episodes of atrial tachycardias coexisting with sinus bradycardia are also common in this disorder (1). It occurs most often in the elderly associated with underlying heart disease or previous cardiac surgery, but it could also occur during the childhood without any heart disease or other contributing factors (2-4), in which case it is considered as a congenital disorder (2-4). The syndrome has two genetic heterogeneities: SSS1 and SSS2. The familial autosomal recessive form (SSS1) caused by mutation in the SCN5A gene (3), an autosomal dominant form of sick sinus syndrome (SSS2) is caused by mutation in the HCN4 gene (4). Autosomal recessive congenital SSS1 could be caused by compound heterozygous mutation in the SCN5A gene. Heterozygous mutation carriers were asymptomatic, but some showed subclinical evidence of a latent cardiac conduction system disease, particularly first-degree heart block. However, autosomal dominant form of SSS (SSS2) has a phenotypic diversity. In our family members, two patients have syncope and have cardiac pacemaker, and two patients have marked sinus bradycardia (27 bpm, min, average 40 bpm and 35 bpm, min. average 46 bpm) without symptoms. In the light of the mentioned literature, we think that this pattern reflects an autosomal dominant form of SSS. Currently, in our

country the genetic testing for SCN5A and HCN4 is not available. When we look at the national literature about this topic, we have found out only a case report about familial SSS suggesting autosomal dominant inheritance in two siblings whereas parents and other siblings showed no evidence of sinus node disorder (5). Finally, the presence of the familial form of SSS should be considered and detailed family history should be screened in such a patient with SSS.

Osman Sönmez, Ahmet Bacaksız, Mehmet Akif Vatankulu, Hakan Ulucan<sup>1</sup>, Ömer Göktekin Department of Cardiology, Faculty of Medicine, Bezmialem Vakıf University, İstanbul-*Turkey* <sup>1</sup>Department of Medical Genetic, Cerrahpaşa Faculty of Medicine, İstanbul University, İstanbul-*Turkey* 

#### References

- Olgin J, Zipes DP. Specific Arrhythmias: Diagnosis and Treatment In: Bonow RO, Mann DL, Zipes DP, Libby P, editors. Braunwald's Heart Disease: A Textbook of Cardiovascular Medicine, 9th ed. Philadelphia; Saunders. 2012.p.817-8. [CrossRef]
- Benson DW, Wang DW, Dyment M, Knilans TK, Fish FA, Strieper MJ, et al. Congenital sick sinus syndrome caused by recessive mutations in the cardiac sodium channel gene (SCN5A). J Clin Invest 2003; 112: 1019-28. [CrossRef]
- Milanesi R, Baruscotti M, Gnecchi-Ruscone T, DiFrancesco D. Familial sinus bradycardia associated with a mutation in the cardiac pacemaker channel. New Eng J Med 2006; 354: 151-7. [CrossRef]
- Nof E, Luria D, Brass D, Marek D, Lahat H, Reznik-Wolf H, et al. Point mutation in the HCN4 cardiac ion channel pore affecting synthesis, trafficking, and functional expression is associated with familial asymptomatic sinus bradycardia. Circulation 2007; 116: 463-70. [CrossRef]
- Çeliker A, Oto A, Özme Ş. Familial sick sinus syndrome in two siblings. Turk J Pediatr 1993; 35: 59-64.

Address for Correspondence/Yazışma Adresi: Dr. Osman Sönmez

Bezmialem Vakıf Üniversitesi Tıp Fakültesi, Kardiyoloji Anabilim Dalı, İstanbul-*Türkiye* 

Phone:+90 212 453 18 00

E-mail: osmansonmez2000@gmail.com

Available Online Date/ Çevrimiçi Yayın Tarihi: 23.10.2013

© Telif Hakkı 2013 AVES Yayıncılık Ltd. Şti. - Makale metnine www.anakarder.com web sayfasından ulaşılabilir.

© Copyright 2013 by AVES Yayıncılık Ltd. - Available online at www.anakarder.com doi:10.5152/akd.2013.248

# Awareness about preventable cardiovascular risk factors of students attending Faculties of Nursing and Literature

Hemşirelik ve Edebiyat Fakültesi öğrencilerinin önlenebilir kardiyovasküler risk faktörleri ile ilgili farkındalıkları

To the Editor,

In 2012 report, The American Heart Association (AHA) highlighted an increased risk levels from cigarette smoking, physical inactivity, unbal-

anced body mass index and unhealthy nutrition habits in adults over the age of 20 (1). Therefore, in this study, the objective is to define the level of knowledge about preventable cardiovascular risk factors and the level of awareness about individual risk factors for undergraduate level students in the Faculties of Nursing and Letters of a Istanbul University.

The study was carried out between October 2011 and February 2012. The participants were first and third class students from the faculty of nursing and letters. The participation of students in the study was voluntary. Data was organized using individual knowledge form and "Cardiovascular Disease Risk Factors Knowledge Level (CARRF-KL) Scale" (2). Of the 900 participants, 63.8% were female and 36.2% were male. The mean age was 21.12±3.69. Overall 19% of the participants were from the faculty of nursing while 81% were from the faculty of letters. 56.4% of the participants were first class and 43.6% were third class. In our study, we found that, among the participants from the faculty of letters, there were higher risk levels as indicated by waist circumference and body mass index (BMI) measurements, tobacco smoking and alcohol usage rates, preference for higher consumptions of hamburgers, French fries, saturated fat meals, margarine, and salt.

As can be seen in Table 1, among participants from the faculty of nursing we found a desired level of physical activity, healthy diet, and low sodium consumption (p<0.05).

In studies where participants were university students, the rates of smoking and alcohol usage and physical inactivity were high; however, the rates of smoking and alcohol usage by nursing and medical students were very low and they also had a desired level of physical activity (3, 4). Physical inactivity is a global health problem causing the deaths of more than 2 million people each year. The World Health Organization, has recommended that individuals must have a daily regimen consisting of medium to intense aerobic physical activity and resistance (muscle-strengthening) exercises for adults between the ages of 18-64 (5).

In this study, CARRF-KL scale "risk factors, risk behavior knowledge level" is higher for students who are tobacco/cigarette non-smokers and do not use alcohol (p<0.05) (Table 2). This situation reflects the relationship that exists between knowledge and lifestyle behaviors. As similar to our study, Metintaş et al. (6) also found higher CARRF-KL scale risk factor knowledge levels for students who are tobacco/cigarette non-smokers.

CARRF-KL total knowledge levels were also found higher for students who regularly exercise 30-45 minute/day, have a normal BMI and waist circumference (p>0.05), eat whole grains, low-fat, protein-rich, and low sodium meals (p<0.05) (Table 2). Metintaş et al. (6) also found lower cardiovascular risk factor knowledge level in students who were obese and physically inactive.

As a result of this study, awareness of nursing students about cardiovascular risk factors and risk behaviors such exercising, consuming less salt, eating healthy, and having a normal body mass index and waist circumference, was found to be higher.

Hilal Uysal, Nuray Enç, Yeşim Cenal\*, Ahmet Karaman\*, Canan Topuz\*

Department of Medical Nursing, \*Nursing Faculty Student, Faculty of Nursing, Florence Nightingale İstanbul University, İstanbul-*Turkey*