

Waist Circumference and Thromboembolic Risk in Non-Valvular Atrial Fibrillation

Snežana Lazić¹, Sanja Marković², Maja Šipić¹, Bratislav Lazić³

¹University of Pristina, School of Medicine, Internal Clinic-Kosovska Mitrovica, Serbia, ²Clinical Hospital Centre Pristina, Internal Clinic- Gracanica, Serbia, ³University of Pristina, School of Medicine, Surgical Clinic-Kosovska Mitrovica, Serbia

Introduction

It is considered that abdominal obesity is one of the mediators of association between atrial fibrillation (AF) and metabolic syndrome.

Aim

To evaluate anthropometric parameters in valvular and non-valvular AF and to establish the correlation between waist circumference and thromboembolic risk score in the non-valvular AF group.

Method

History, anthropometric parameters, standard 12-lead ECG and heart ultrasound.

Results

The study analyzed 90 subjects with AF. The Group 1 included 12 (13.3%) subjects with valvular AF, while the

Group 2 included 78 (86.7%) subjects with non-valvular AF. The body weight was 66.6±13.5 vs. 80.0±13.2 kg, respectively ($p=0.002$); body height 165.3±5.6 vs. 171.4±8.0 cm, respectively ($p=0.012$); waist circumference 79.2±12.7 vs. 97.0±15.9 cm, respectively ($p<0.001$); hip circumference 93.3±12.7 vs. 101.6±12.2 cm, respectively ($p=0.030$); and BMI (body mass index) 23.8±3.8 vs. 26.7±3.9 kg/m², respectively ($p=0.016$). CHA₂DS₂-VASc score was 4.0 (1.0-6.0) vs. 3.0 (0.0-7.0). There was no significant correlation between waist circumference and CHA₂DS₂-VASc score ($r=-0.135$; $p=0.239$) in the non-valvular AF group.

Conclusion

Body weight, body height, waist circumference, hip circumference and BMI were significantly higher in the non-valvular AF group compared to valvular AF group. Waist circumference was not correlated with CHA₂DS₂-VASc score in our non-valvular AF group.