# Heart rate recovery and right ventricular systolic dysfunction in patients with obesity

*Obezlerde sağ ventrikül sistolik disfonksiyonu ve egzersiz sonrası kalp hızı toparlanması*

Obesity is one of the major threats to public health and has been classified as an epidemic affecting 1 billion overweight and 300 million obese people globally (1). Epidemiologic data have clearly demonstrated that obese or overweight status increase the risk of premature mortality, cardiovascular disease, type 2 diabetes mellitus, respiratory diseases, certain types of cancer and other adverse outcomes (2). Therefore, identifying high risk patients for future adverse events have paramount importance as well as primary prevention of obesity.

In this issue of Anatolian Journal of Cardiology, Tigen et al. (3) have presented their study results implying that heart rate recovery and tricuspid annulus systolic velocity values were lower in patients having higher body mass index. Those patients also had a decrease in exercise distance, which might be partly attributed to the blunted increase in heart rate (4). The authors also found that tissue Doppler derived left ventricular septal systolic velocity was lower in obese patients with higher body mass index. This finding suggested biventricular impairment. Notwithstanding with these results, diabetes and hypertension were relatively frequent in the study population (41% and 61%, respectively) but the authors claimed that these results reflected independent effect of obesity on right ventricular functions as suggested by Wong et al. (5). However, few important questions have remained unanswered: How can we identify obese patients already having high risk for future adverse events? Can a cutoff value of body mass index be used for selecting obese patients who require further diagnostic studies such as exercise test or echocardiography? Nevertheless, heart rate recovery and tricuspid annulus systolic velocity are prognostic indicators as stated by the authors and can be used in further studies for selecting high-risk obese patients.

Therefore, this interesting study may provide new opportunities in the field of obese patient management.

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## References

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