








“Obesity paradox” after transcatheter aortic valve implantation – true or false? Experience from Dubrava University Hospital

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Background: Obesity has become a great healthcare problem and its incidence has been expanding over past several decades. Taking that fact into account, it is reasonable to expect an increasing number of obese patients with severe aortic stenosis being referred for transcatheter aortic valve implantation (TAVI). Obesity is considered an important and modifiable risk factor for cardiovascular morbidity and mortality and has been associated with greater mortality in the general population and patients with cardiovascular disease, but several studies have showed better outcomes for overweight and obese patients after surgical aortic valve replacement and a few even after TAVI¹. We analyzed the effect of body mass index (BMI) on outcomes of elderly high-risk patients with severe aortic valve stenosis undergoing TAVI.

Methods and Results: We analyzed 252 consecutive patients who underwent TAVI procedure in our institution from 2012 to October 2020. We observed that BMI did not significantly differ among patients who had better outcome. Patient with better survival had mean BMI of 28.86 kg/m², and patients who died during follow up had mean BMI 28.25 kg/m². We could say that those with slightly higher BMI had better survival, but that difference was not significant.

Conclusion: Unlike in other studies, we found no “obesity paradox” after TAVI. This might be due to the limitations of our analysis since the data presented in this cohort included patients from the early TAVI era, where the learning curve could have influenced these results. Earlier, our patient selection was somehow homogenous- they were all older and high risk which might have affected our results. Better patient selection using now available risk scores, the procedure itself, and post-operative management might provide a more reliable data in the future.

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LITERATURE

- Luo ZR, Chen LW, Oiu HF. Does the “obesity paradox” exist after transcatheter aortic valve implantation? *J Cardiothorac Surg.* 2022 Jun 13;17(1):156. <https://doi.org/10.1186/s13019-022-01910-x>