Transcatheter implantation of the aortic valve: transfemoral and transapical approach

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Aortic disease is the most common form of heart valve disease in developed countries, affecting 3% of the world’s population over the age of 65. The standard method of treating a symptomatic patient is surgical replacement of the valve. In patients with a high risk for surgery, the valve is implanted in a minimally invasive way, with transcatheter approach.1,2 This paper will present the success of treating aortic valve disease using the transcatheter method. Due to possibility of implantation via both transapical and transfemoral approaches, the patients featured in this study received valves manufactured by Edwards Lifesciences. We will also present the tasks of the nurse in preparing the patient, the operating room, and the valve itself. The obtained results of this research led to the conclusion that, apart from the duration of hospitalization, there was no statistically significant difference between the transcatheter aortic valve implantation (TAVI) procedure performed with transfemoral approach versus transapical approach at University Hospital Centre Rijeka. The duration of hospitalization in average is significantly shorter in patients who underwent TAVI procedure with transfemoral approach. The condition of the patients according to the New York Heart Association Classification significantly improved in both groups, there was no difference between the groups.