

The role of the nurse in patient care after a transcatheter aortic valve implantation procedure in the Cardiac Intensive Care Unit of University Hospital of Split

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Introduction: Aortic stenosis (AS) is the most common among valvular diseases and it mainly affects people over 65 years old. AS is a progressive disorder that can be divided into two phases; the stage of aortic sclerosis and the stage of aortic stenosis. Transcatheter aortic valve implantation (TAVI) is performed through a retrograde transfemoral approach, using a catheter on a beating heart, an artificial biological valve is implanted in place of the degenerated valve^{1,2}. After the TAVI procedure, patients are admitted to the Cardiac Intensive Care Unit for continuous monitoring. The goal is to disclose the important role of nurses/nursing technicians in post-procedural care and the course of treatment after a successful TAVI procedure trough a case report. Medical literature and patient records from the archives of University Hospital of Split were used as sources and guidelines for this report.

Case report: A patient with history of arterial hypertension, diabetes mellitus type 2, permanent atrial fibrillation with severe aortic stenosis is hospitalized at University Hospital of Split, undergoing periprocedural screening and TAVI preparation protocols. After a successful procedure, the patient is admitted to the Cardiac Intensive Care Unit. During the 24-hour monitoring and prevention of possible complication, the course of treatment becomes complex after periprocedural bifascicular block develops into 3rd degree atrioventricular block. Afterwards, the patient is being prepared for a permanent pacemaker placement.

Conclusion: TAVI is the gold standard in treatment for patients with severe aortic stenosis that have a high surgical risk or have contraindication for a classical surgery. 2019 was the year that UHC Split began effectively practicing TAVI procedures. As an equal member of the healthcare team, nurses/nursing technicians have a big role and responsibility in patient care. Here, we reflected on the irreplaceable role of a nurse in the process of quality nursing care. Furthermore, nurses now face a new scope of work with greater responsibility, thus indicating the need for further education, competencies, and expertise. To provide the best care, nurses/nursing technicians should continuously improve and renew their knowledge, keeping up to date with new technological and scientific achievements.

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