# Conscious Sedation/Monitored Anesthesia Care and Outcomes in Patients Undergoing Transcatheter Aortic Valve Replacement: KAMC Experience

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**Background**:

Conscious sedation is growing in popularity as an anesthetic choice for transcatheter aortic valve replacement (TAVR), although some patients continue to be treated with general anesthesia.

**Aim and objectives**:

This study investigated the safety of conscious sedation/monitored anesthesia care (CS/MAC) for patients receiving TAVR.

**Methods**:

This retrospective study analyzed prospectively collected data from 157 consecutive patients who underwent TAVI at our institution between 2020 and June 2024.

**Result:**

Conscious sedation/monitored anesthesia care was utilized as an anesthetic choice for the majority of our transcatheter aortic valve replacement cases. Results revealed lower risks of 30-day mortality, one-year mortality, major bleeding, acute kidney injury, vasopressor/inotropic support, shorter procedure time, intensive care unit stay, hospital stay and discharge home in patients receiving CS/MAC without significant impact in procedure success rate, risks of cardiac-vascular complications (e.g., myocardial infarction) and stroke. Median LOS of our patients was 2 days. 67 % of our patients were discharged within 3 days. Conscious sedation/monitored anesthesia care showed a pivotal role for enhanced recovery and early discharge post-TAVR

**Conclusion**:

Our results demonstrated that the use of CS/MAC was feasible and safe in patients receiving TAVR. Higher levels of medical care and teamwork, including anesthesia management, can reduce the length of hospital stay and improve outcomes among TAVR patients. Moreover, enhanced recovery post-TAVR greatly impacts patient satisfaction, bed viability, and hospital cost.

**Keywords:**

TAVR, CS/MAC, outcomes