

**Comparison Outcome of Surgical Pulmonic Valve Replacement (SPVR)
And Transcatheter Pulmonic Valve Replacement (TPVR)**

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Background: Transcatheter pulmonary valve replacement (TPVR) has emerged as an alternative to surgery in patients with pulmonary valve dysfunction.

Objective: To compare outcome of TPVR and SPVR in mortality rate and complication rate. Comparison in early outcome (Intra-operation and in-hospital), midterm outcome (within 1 month) and long term outcome (within 1 year)

Methods: We retrospectively analyzed medical record of all patient of RVOT dysfunction from January 1996 to December 2020 who got TPVR and SPVR

Results: A total of 194 patients, 60 TPVR (30.9%) and 134 SPVR (69.1%). Both TPVR and SPVR result in decreased pressure gradient, pulmonary regurgitation and RVSP. Primary outcome of mortality rate was no difference between groups in early, midterm and long term outcome. SPVR is associated with significant early complication of shock (p-value <0.001) but no significant complication in midterm and long term outcome. Length of hospital stay and length of intubation are shorter with TPVR than SPVR (p-value <0.001).

Conclusion: In conclusion, Primary outcome of mortality rate was no difference in TAPVR and SPVR. SPVR is associated with significant early complication of shock but no significant complication in midterm and long term outcome. Length of hospital stay and Length of intubation are shorter with TPVR than SPVR

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