

Physician - Physician - Aortic (Thoracic) Pathologies and Surgery/Endovascular Interventions

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Postoperative Aortic Valve Insufficiency: Outcomes of Aortic Valve Preservation in Type A Aortic Dissection

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Objective: The study aimed to assess the impact of preserving the aortic valve during supracoronary aortic interposition on aortic valve function in patients with type A aortic dissection.

Methods: The study included 95 patients (65 males, 30 females; mean age: 58.94±11.4 years) who underwent supracoronary aortic interposition due to type A aortic dissection between 2019 and 2023. Patients who completed early- and mid-term postoperative follow-ups were included in the study. Patients who died or had aortic valve replacement were excluded. Preoperative and postoperative transthoracic echocardiography results were compared for aortic insufficiency (AI).

Results: Preoperative echocardiography showed no AI in 39 patients. During follow-up, 27 patients still had no AI. Mild AI developed in eight patients, and moderate AI developed in four. Preoperative mild AI was present in 40 patients, with 24 maintaining the same degree of AI, six showing no AI, and 10 progressing to moderate AI. Of 16 patients with preoperative moderate AI, seven showed regression to mild AI postoperatively, while five had unchanged moderate AI. Five patients with moderate AI underwent aortic resuspension. Among these patients, AI persisted at the same level postoperatively in one patient, two patients had no AI, and two had mild AI.

Conclusion: The degree of aortic valve insufficiency is crucial in type A dissection surgery. Assessing the aortic valve structure and preserving valves that do not require replacement can reduce cross-clamp time, complications, and mortality. Regular transthoracic echocardiography follow-up is essential to monitor the progression or regression of AI in these patients.

Keywords: Aortic dissection, aortic insufficiency.

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