

Optimal timing for surgery in infective endocarditis

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Background: Timing of surgery continues to be one of the most challenging point of interest in management of patients with acute infective endocarditis (IE). Recent guidelines recommend early surgery in most patients as soon as indication is met.^{1,2} We present our 26-year experience of surgical treatment for IE with additional analysis of optimal timing of surgery.

Methods and Results: An analysis of prospectively collected data of 325 adult patients who underwent surgery due to acute IE between 1996 and 2022 at our institution was performed. Isolated aortic valve IE was observed in 48%, isolated mitral valve IE in 32%, multiple valves were affected in 12% and right-sided valves involved in 7% of cases. There were 12% of patients with previous cardiac operations and 10% of patients with prosthetic valve endocarditis. Perioperative mortality was 10.7% (35/325). An additional analysis was performed on subgroup of 155 consecutive patients with supplementary data available. They were divided in 2 groups: patients operated early (up to 14 days of diagnosis) or late (after 14 days). Patients in early-surgery group were significantly younger, had better renal function, lower incidence of neurologic impairment and higher incidence of perivalvular abscess. There was an observed tendency of higher valve repair rate in late-surgery group. Difference in perioperative mortality was observed (5.3% early-surgery group; 10.0% late-surgery group) but was not significant ($p=0.277$).

Conclusion: The current evidence and our experience suggests survival benefits in early operated patients with IE, if an urgent indication for early surgery is present. To delay surgery for prolongation of preoperative antibiotic therapy is likely not going to lead to any additional patient benefit.

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LITERATURE

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