

Echocardiography-Guided Balloon Mitral Valvotomy: Transesophageal Echocardiography versus Intracardiac Echocardiography.

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摘要

Abstract

BACKGROUND AND AIM OF THE STUDY: Although balloon mitral valvotomy (BMV) can be guided by on-line transesophageal echocardiography (TEE) or intracardiac echocardiography, few reports have been made comparing these methods. The study aim was to compare on-line TEE and on-line intracardiac echocardiography in the guidance of BMV. METHODS: Fifty-five consecutive patients with significant mitral stenosis (mitral area \leq 1.5 cm²), but without significant mitral regurgitation (\leq Sellers grade 2) or left atrial cavitory thrombus, underwent BMV. Patients were prospectively randomized to two groups: group A (n = 28) received on-line guidance by multiplane TEE, while group B (n = 27) received on-line guidance by intracardiac echocardiography. Pre-procedural and post-procedural data were compared between these groups. RESULTS: There were no significant differences in baseline data and procedural outcomes. On-line TEE was found to be of great help for septal puncture, immediate assessment of results, and the prevention and detection of complications. On-line intracardiac echocardiography also aided in septal puncture and was better tolerated by patients, but had less imaging capabilities, was more expensive, required a second venous access, and on occasion interfered with manipulation of the puncture and balloon catheters. CONCLUSION: Although both TEE and intracardiac echocardiography were safe and effective for on-line guidance of BMV, TEE provided better imaging capabilities.