Bail-Out Stenting for Left Main Coronary Artery Dissection during Catheter-Based Procedure: Acute and Long-Term Results

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Summary

Background: The optimal treatment of patients with left main coronary artery (LMCA) dissection during catheter-based procedure remains uncertain.

Hypothesis: In cases with significant LMCA dissection occurring during catheter-based procedure, prompt stent implantation may be safe and associated with favorable clinical outcome.

Methods: We evaluated the acute and long-term results of bail-out stenting for LMCA dissection occurring during a catheter-based procedure in 10 patients.

Results: Initially, there was no significant stenosis of LMCA segments in these patients. Catheter-induced dissection occurred in eight patients (during diagnostic angiography in three patients and during guiding catheter manipulation in five patients). Two patients suffered dissection in the setting of stent deployment in other vessels. Therefore, bail-out stenting for LMCA dissection was performed in a total of 10 patients. In four patients, hypotension developed and an intra-aortic balloon pump was placed during the procedure. Stents were successfully deployed in all patients; there was no in-hospital mortality. Six-month angiographic follow-up was performed in eight patients. No angiographic restenosis (diameter stenosis \geq 50%) was observed in any patient at follow-up study. During a mean follow-up of 31 ± 25 months after hospital discharge, there was no major adverse cardiac event (death, myocardial infarction, and target lesion revascularization).

Conclusions: Bail-out LMCA stenting is technically feasible and showed good acute and long-term results in a small series of patients.

Key words: left main coronary artery, dissection, stent

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