

Abstract

Balloon dilatation and stenting of thrombotic lesions remains a challenge for coronary intervention due to insufficient reduction of thrombus and the risk of abrupt vessel closure, distal embolization and no reflow. Although the achievement of TIMI grade 3 in the infarct related artery is the primary goal of primary angioplasty, an impaired microvascular reperfusion is suggested by persistent ST-segment elevation after an apparently successful recanalization.

Manual thrombus removing devices (TRD) have been introduced as accessory tools for the extraction of coronary thrombi, with the advantage of establishing prompt restoration of antegrade flow and unmasking the underlying lesion. The Diver CE thrombectomy catheter operates by manual thrombus aspiration through multiple holes in the catheter tip.

The aim of the study was to evaluate the safety and efficacy of manual thrombectomy (Diver CE) compared to conventional PCI in restoring arterial patency and microvascular perfusion in patients with acute STEMI.

Key Words :

Adenosine triphosphate - Congestive heart failure - Chloride .