

Clinical Features and Short-term Outcomes of Excimer Laser Coronary Angioplasty

University of Tokai, Japan

Hirofumi Nagamatsu

BackgroundExcimer laser coronary angioplasty (ELCA) has been recently reimbursed from 2012 in Japan for percutaneous coronary intervention (PCI). We evaluated the short-term clinical results of consecutive cases who underwent ELCA in our hospital. **Methods**Between May 2012 and June 2014, consecutive 133 patients presented with acute coronary syndrome (ACS) and stable coronary disease. ELCA was indicated by the operator after consideration of the angiographic and intravascular ultrasound (IVUS) or optical coherence tomography (OCT) findings. **Results**Of the 133 patients studied, Average age was 68.3 years old and 82.3% was male. Lesion characteristics contained 62 ST-elevated myocardial infarction (STEMI) (47%), 13 non-STEMI (10%), 9 unstable Angina pectoris (uAP) (7%), 19 in-stent re-stenosis (14%), and 30 stable angina pectoris (SAP) (23%). Procedural success (device pass the lesion) was 97.8%. Treatable coronary perforation occurred in 3 cases (2 cases were patients with STEMI). 30 days mortality of STEMI patients was 5%. **Conclusion**ELCA is feasible and safe device for the treatment of patients with both patients with SAP and acute coronary syndrome. Further investigations will be required with larger number of patients to establish the effectiveness of ELCA.