

Outcomes after repeat intervention with everolimus-eluting stent for sirolimus-eluting stent restenosis lesion with stent fracture.

Saiseikai Yokohama City Eastern Hospital, Japan  
Yasunari Sakamoto

**Background:** Presence of stent fracture (SF) after sirolimus-eluting stent (SES) implantation has reported to be associated with an increased risk of adverse events and are previously reported. But little is known about the outcomes after re-intervention for SES restenosis lesion with SF. **Method:** From April 2007 to August 2011, total 2059 lesions implanted SES during PCI at our hospital. Total 228 lesions, 11.1% had restenosis (defined as %diameter stenosis >50%) in follow-up angiogram until March 2013. Subjects of the study were 49 lesions 42 patients those implanted SES for denovo coronary artery stenosis and in-stent restenosis with SF was documented in follow-up angiogram. During the target lesion revascularization procedure, 14 lesions implanted everolimus-eluting stent (EES group), 20 lesions implanted sirolimus- and paclitaxel-eluting stent, (SS group). And also 15 lesions were dilated with balloon angioplasty alone (POBA group). We compared the outcomes of 3 groups retrospectively. **Result:** Baseline characteristics were similar. One-year cumulative incidence of restenosis after repeat intervention those calculated by Kaplan-Meier methods were EES group 22%, SS group 66% and POBA group 76%, respectively. EES group significantly reduced the cumulative incidence of restenosis after repeat intervention (versus SS group;  $p=0.0471$  and POBA group;  $p=0.0085$ ). **Conclusion:** Cobalt chromium EES implantations were superior to SS stent or POBA in 1-year after re-PCI for SES restenosis lesion with SF.