

Yoshihisa Nakagawa

Antiplatelet therapy after Sirolimus-eluting Stent Implantation, Japanese Clinical Experience

Coronary drug-eluting stents (DES) have been widely used in clinical practice. Five-year outcomes were comprehensively evaluated in 12,812 consecutive patients undergoing sirolimus-eluting stents (SES: 1st generation DES) implantation in the j-Cypher registry. This registry is a physician-initiated prospective multi-center observational study in Japan enrolling all consecutive patients in whom placement of SES had been attempted. Cumulative incidence of definite ST was low (30-day: 0.3%, 1-year: 0.6%, and 5-year: 1.6%). Late and very late ST continued to occur without attenuation up to 5 years after SES implantation (0.26%/year). However, the rate of late stent thrombosis seemed to be acceptably low. Cumulative incidence of target lesion revascularization (TLR) within the first year was low (7.3%). However, late TLR beyond 1 year also continued to occur without attenuation up to 5 years (2.2%/year). Late catch-up phenomenon as indicated by the increase of TLR beyond 1 year was clearly demonstrated in lesions treated by SES, but not in lesions treated by BMS. The independent risk factors for TLR beyond 1 year were similar to those predictors for TLR within the first year. Late adverse events such as very late ST and late TLR are clearly the ongoing late adverse events associated with the use of SES. We should continue to evaluate longer-term outcome beyond 5 years to fully estimate the magnitude of problems associated with use of SES.