The Efficacy of ultra long Everolimus-Eluting Stent (33,38mm) Implantation in Patients with diffuse long coronary artery lesions.

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Background: In previous trials, longer drug-eluting stent(DES) length has been associated with adverse clinical events. In current practice, the appearance of ultra long DES led to cover the entire atherosclerotic lesion and the stented length tends to be longer than the lesion length. However, the impact on clinical outcomes of the ultra long everolimus-eluting stent(ULEES) implantation with diffuse long Coronary Lesions is not clearly investigated. We aimed to evaluate the long-term clinical efficacy and safety of ultra long EES(ULEES) in diffuse lesion versus spot single EES(SSEES) stenting in short lesion.

Methods/Results: ULEES group was defined the diffuse long lesion cases treated with the use of EES length of 33 or 38mm. SSEES group was defined the short lesion(< 20mm) cases treated with the single stent of EES.291 patients(317 lesions) who were undergone successful PCI with EES were examined. The ULEES group and SSEES group were 89 patients(96 lesions) and 202 patients(221 lesions), respectively. Follow-up period was 1-year and the restudy CAG was performed within 10 months. The prevalence of diabetes and the case of off-label stent use were higher and the lesion length was longer (37.0 \pm 7.6 vs. 14.3 \pm 6.2, p < 0.01) in ULEES group than in SSEES group. Initial success rate was similar in both groups. There was no difference in 1-year TLR(3.1% vs. 1.8%), stent thrombosis(1.0% vs. 1.4%) and MACE(5.6%vs 3.5%) rates between 2 groups.

Conclusions: Like a result of the use of spot EES with short lesion, our results suggest that the use of ultra long EES with diffuse long lesion is effective and safe.