Initial clinical outcome of PROMUS PREMIER stent on ostial lesion

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Purpose: Several reports have said that PROMUS Element stent easily occurs longitudinal stent deformation (LSD). So we've hesitated to use this stent on LMT or RCA ostial lesion for fear of LSD by Guiding catheter. Now new PROMUS PREMIER stent is available and additional proximal connectors improve longitudinal strength where deformation is most common. However, it's unclear in the real world setting. To address the issue, we retrospectively evaluated the procedural and initial outcome of PROMUS PREMIER stent implanted on ostial lesion in our institute.

Method: From 7th May 2014 to 18th June 2014, consecutive 12 patients with 13 ostial lesions treated by PROMUS PREMIER stent were enrolled. The procedural and initial clinical outcome was retrospectively evaluated.

Result: The mean age of patients was 74.1 ± 7.3 ; 67% of male and 33% of diabetes. The lesion was located in the LMT in 2 cases and proximal RCA in 11 cases. Stent implantation was successfully performed in all cases, however LSD occurred in one case. Only one LSD case was very tough case because of severe calcification. We used Guide Liner to deploy another stent to distal RCA. Guide Liner couldn't pass #2 distal and made LSD on proximal stent edge of PROMUS PREMIER. Then we bailed out this situation by balloon dilation. We succeeded in deploying stent on #3 with 4Fr ST01 KIWAMI.

Conclusion: LSD might be rare in PROMUS PREMIER, but we experienced LSD in one tough case. So we report initial outcome of PROMUS PREMIER on ostial lesion.