

<sup>1</sup>Yokohama Sakae Kyosai Hospital

Taku Iwaki<sup>1</sup>, Hiroshi Yamazaki<sup>1</sup>, Toshiki Asada<sup>1</sup>, Rie Sasaki<sup>1</sup>, Yuya Kimura<sup>1</sup>, Hiromasa Kato<sup>1</sup>, Tsuyoshi Nozue<sup>1</sup>, Sei Nakada<sup>1</sup>, Ichiro Michishita<sup>1</sup>

**Background:** Reverse wire technique is sometimes used at wire insertion into an extremely angulated side branch. We report a case successfully treated with this technique. When a guide wire did not pass the angulated bifurcation lesion by usual technique. **Case report :** 64-year-old Male complained of a chest oppression at effort from few days ago. CAG revealed the 90% stenosis of mid LAD. The diagonal branch bifurcated at about angle of 90 degree from the just distal of the stenotic lesion. We performed PCI. First, we passed the guide wire through the stenotic lesion to distal LAD. Second, we tried passing the guide wire to the side branch to prepare for side branch occlusion. It was very difficult to cross the guide wire to the side branch because of extreme angulation. We tried the reverse wire technique. First we advanced the guide wire into the distal LAD, and then the reverse wire system also into distal LAD with Crusade through the bifurcation part. Then, we pulled back the reverse wire with some rotation, and the wire tip could easily enter the side branch. We slowly pulled backed the reverse wire more, the wire gradually advanced through the diagonal branch. Then, we directly implanted a biolimus-eluting stent at the mid LAD. Final CAG revealed optimal results. Side branch occlusion did not occur. **Conclusion :** When a guide wire can not pass the angulated bifurcation lesion by usual technique, this reverse wire technique may be useful. This technique will also save time for guide wire insertion.