1102　A case of complicated uncontrollable Knuckle Wire Technique (KWT) at long CTO PCI

[Target Lesion] RCA #1-3 CTO was long lesion,focal severe calcified and ambiguous bending course lesion.This CTO exit was #3 bifurcation and poor quality.Collateral channels from LAD showed that CTO exit is major bifurcation and AV br is small,PD br. has big perfusion territory.However,we confirm that clear interventional collateral channel to PD br. was only 3rd septal br.If we used 3rd septal br. channel during retrograde procedure,it is assumed that the risk of ischemic reaction is high, because actually this septal channel looks like direct connection.[Strategy] Most important problem was ischemic reaction at retrograde approach. Therefore,at first we planed to perform previous antegrade preparation due to primary retrograde approach and Knuckle Wire Technique and R-CART based on AP CTO club algorithm.[Final Result] We started antegrade preparation as a concept of　keeping in the vessel by using intermediate wire supported by corsair.But wires deviated and moved in the side br. because of prevention of intimal severe calcified lesion. We exchanged to the　XT-R for the possibility of crossing another route and the possibility of KW, and then XT-R became a knuckle shape. But KW deviated from main trunk,the risk of perforation and bleeding was promoted by removal of wire and we have decided not to pull out KW.For the purpose of bailout for complicated uncontrollable KW, at first, we performed 2.5 mm short balloon expansion at the proximal CTO part. After that, re-wiring by Neo3 from balloon expanded position combined with sasuke and it became possible to select the distal portion of the RV br. route. We changed from Neo3 to SION black and we were successful to change the start position of the knuckle wiring course, therefore we could succeed sion black KW to distal CTO part. We could finished antegrade preparation by this intentional re-directional KW control. We were able to established conventional R-CART more speedily because of retrograde KWT and the confirmation of IVUS findings of bidirectional wires location.It may be pitfall of KWT that the KW sometimes deviates from main trunk at hard lesion or vessel branch. We report this case as bailout strategy for the pitfall of KWT in long CTO PCI.