A case of successful hemostasis for retrograde wire perforation without discontinuing the procedure

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A 70's year-old man underwent coronary CT angiography in another hospital, and was referred to our hospital for three-vessel disease including chronic total occlusion(CTO) in the right coronary artery(RCA). We decided to treat by a percutaneous coronary intervention(PCI), because transthoracic echocardiography revealed there was no wall motion abnormality. We performed PCI for left coronary artery at first, following a staged PCI for CTO in the RCA. During attempting the PCI for CTO in the RCA we could not identify the entry of CTO by intravascular ultrasound, so we started a retrograde approach via the channel from left circumflex to distal RCA without the wire penetration from an antegrade approach. After introducing to the CTO lesion with SION guide wire with Corsair michrocatheter, we attempted a retrograde approach with a Gaia second and Conquest Pro, but it was difficult to control guide wires because of large motion by heartbeat. Then the wire perforation occurred but we decided to continue the procedure, because his vital signs were stable. And we thought perforation was able to be sealed by deploying stent in intima because the wire perforated through the subintima space. Therefore we changed to an antegrade approach, and the CTO lesion was antegradely crossed with a XT-R guide wire. Three Xience Xpedition stents were deployed throughout the lesion. Subsequently coronary angiography revealed remaining little bleeding from the perforation. After Additional long inflations performed with Ryusei we confirmed there were good coronary flow, acceptable stents expansion and no bleeding by final angiography.