Therapeutic outcomes of PCI for chronic total occlusions using both radial arteries

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[Objective]Our institution is actively undertaking treatment of CTO by TRI and aims to perform less invasive procedures by also performing contralateral angiography from the opposite radial artery. These results were studied here.

[Methods]Of 163 patients who underwent TRI for CTO from 2003 to 2011, subjects were 64 patients who had contralateral angiography performed from the opposite radial artery. Procedure characteristics, acute complications and late cardiac events(follow-up period of 45.9±30.5 months) were evaluated.

[Results]Of the 64 patients, the retrograde approach was taken in 18 patients, and 14 of them had 7 Fr. guiding catheters inserted from both radial arteries. The mean time of procedure was 117±55 minutes, mean amount of contrast used was 284±96ml, and the procedural success rate was 79.7%. Acute complications occurred in only four patients with coronary artery perforation by the guidewire, and no patients had bleeding complications. Late cardiac events were 1 case of cardiac death, 1 AMI, 6 TLR, and late cardiac event-free survival was 93.8%. Details of the outcomes of the retrograde approach taken in both radial arteries will be given when this paper is presented.

[Conclusion]Good results were achieved in the initial and late outcomes of TRI on CTO using both radial arteries. It is anticipated that by using both radial arteries, bleeding during and after the procedure can be reduced, and the amount of contrast used can be decreased.