P47

요골동맥 천자를 통한 미성숙 자가동정맥루의 혈관확장술: 증례 보고

한마음병원 신장내과

이 형 석

Intervention via Transradial Approach for Immature Autogenous Radiocephalic Fistula : A Case Report

Hyung Seok Lee

Hanmaeum General Hospital, Department of Nephrology

Background: Catheter intervention for early dysfunction of primary radiocephalic fistula has until now been performed mainly via transcephalic or transbrachial approach. Both brachial artery approach and retrograde cephalic vein approach have some disadvantages in terms of damage to the feeding artery and immature fistula. Recently, transradial artery approach has been used in the intervention for fistula dysfunction, but any study has not been reported in Korea.

Methods: A 70-year-old man had a primary radiocephalic fistula operation in the Hanmaeum general hospital in May, 2010. After 3 months, AVF had inadequate flow to support the prescribed dialysis blood flow, and juxta-anastomosis stenosis was suspected in Doppler ultrasonography. With 21G micropuncture needle, we punctured radial artery distal to anastomosis site, and advanced introducer to the proximal radial artery beyond radiocephalic anastomosis area. Fistulography showed juxta-anastomosis stenosis (70%, 2.5 cm length) at swing point. Using 0.035 inch guidewire, we changed direction into the fistula, and introduced 6Fr sheath.

Results: After angioplasty with 5mm, 20mm cutting balloon, remained stenosis was under 20%, and patency was much improved, that anatomical and clinical success was achieved. Any Vessel rupture, distal embolization in the radial artery, hematoma at the puncture site or radial artery spasm have not occurred. After intervention, five minute compression on the puncture site and bandage were enough for hemostasis. The very next day after the PTA, conventional hemodialysis treatment using primary AVF was successful and after another two consecutive successful hemodialysis session using AVF, we could remove his cuffed dual lumen catheter.

Conclusion: Transradial intervention for immature primary radiocephalic fistula is considered safe and have advantages against intervention via transcephalic or transbrachial approach.

Key Words: 요골동맥천자, 미성숙 동정맥루, 혈액 투석
Transradial approach, Tadiocephalic fistula, Hemodialysis