

혈관접근로의 감시 및 당일 인터벤션 시스템 : 다학제적 접근

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Monitoring and One-day Management of Vascular Access: Multidisciplinary Team Approach

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Introduction: Recent studies revealed elective intervention of subclinical stenosis in arteriovenous fistulas (AVFs) reduces the risk of access loss. Regular surveillance of vascular access with ultrasound seems to be an emerging strategy. Here, we report our 6 year-experience of monitoring and one-day management of vascular access with multidisciplinary team approach.

Methods: We set up the AVF surveillance program as an outpatient clinic in Seoul National University Hospital. The multidisciplinary team was composed with nephrologist, vascular surgeon, radiologist and well-trained nurse for this program and the it was connected with day-care center which provided one-day management for urgent vascular problems. Patients with AVFs or arteriovenous grafts (AVGs) were recommended to examine the patency with ultrasound every 3 months and whenever they have emergent vascular problem. If significant stnosis or thrombosis were detected, they underwent percutaneous trasluminal angioplasty (PTA) or surgery at the day. We retrospectively reviewed data between 2009 and 2014.

Results: Total of 1113 patients visited the program who had undergone the AVF or AVG operation at Seoul National University Hospital. AVFs were dominant (973, 87.4%) compared to AVGs (140, 12.6%). Among 5765 visits, 4859 (84.3%) were regular and 906 (15.7%) were emergent. Though interventions were more frequently proceeded among emergent visits than among regular visits (71.4% vs. 28.6%), 154 cases underwent intervention via regular follow-up. When we compared grafts to autologous fistula, patients with AVGs were significantly older (68.4 vs. 60.7 years), took shorter time to first use (69.5 vs. 110.9 days), and showed shorter intervention-free survival. Twenty-nine cases needed PTA or operation for maturation, and the maturation failure rates were quite low as 1.0 % in AVF and 1.4% in AVG. At 1 year, AVG showed much lower primary patency rate compared to AVF (54.0% vs. 82.0%) but similar secondary patency rate (94.0% vs. 96.0%). At the second year, the primary patency decreased to 74.0% for AVF and 48.0% for AVG.

Conclusion: We reported our successful experience of vascular access surveillance program and one-day management system. The AVF surveillance program found considerable cases who needed intervention.

Key Words: 혈관접근로, 당일 인터벤션, 다학제적 접근

Vascular access, One-day management, Multidisciplinary approach