Vascular access and survival in hemodialysis patients in Rasht, Iran.

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ABSTRACT

INTRODUCTION. Arteriovenous fistulas and grafts are two common permanent access methods for hemodialysis. Selection of an appropriate access, appropriate surgical techniques, and treatment of complications are basic principles of long-term maintenance of vascular access. We aimed to assess the survival of arteriovenous fistulas and grafts in our dialysis center.

MATERIALS AND METHODS. A total of 200 cases of vascular access placement in 155 patients were reviewed. Data on the type of access and the duration of a functional access were collected for survival analysis.

RESULTS. The median duration of dialysis was 70.6 months. Among different methods of vascular access, elbows' wrinkle arteriovenous fistulas (57.0%) were the most frequently used vascular access. The longest mean survival period based on the anatomical location was seen in patients with the arteriovenous fistulas of the wrist (100.2 months); however, there were no significant relationships between anatomical location and durability of vascular access. The mean survival of vascular access was 96.4 months in men and 104.9 months in women. The mean vascular access survival in diabetic patients was 78.8 months as compared with 101.6 months in nondiabetics.

CONCLUSIONS. Antecubital arteriovenous fistulas were the most common forms of vascular access among our hemodialysis patients; however, arteriovenous fistulas of the wrist provided a better survival. Monitoring of the arteriovenous access and early diagnosis of its insufficiency can guarantee timely intervention and a better survival time.