



## ARTERIOVENOUS FISTULA SURGERY

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### ABSTRACT

Arteriovenous fistulas (AVF) make up one of the most important routes of entry for dialysis sessions in patients with chronic kidney disease (CKD). AVF is the most preferred method among hemodialysis routes of entry due to reasons such as long survival time, low mortality and morbidity rate, high patient comfort, and increased quality of life. In this article, we aimed to present the surgical methods applied for AVF, the surgical techniques, and how to combat postoperative complications in light of the latest literature.

### INTRODUCTION

CKD can be defined as a chronic and progressive deterioration in the kidney's fluid-electrolyte balance and metabolic-endocrine functions due to the decrease in glomerular filtration value. According to the 2021 data of the Turkish Society of Nephrology, while the occurrence of CKD in the general adult population is

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The success of the AVF depends on many factors, notably the anastomosis technique and the diameter of the vein chosen for surgical intervention. Intraoperative and postoperative use of antiaggregant and anticoagulant increases primary fistula patency. If the fistula operates smoothly in the first 6 months, it can be expected to work for up to 20 years.

Another issue as important as establishing the AVF is the follow-up of the patients and remedy the complications that may occur. Early diagnosis and treatment of AVF complications is an intervention that saves the fistula, extremity, and life of the patient. Therefore, patients should be informed about all possible complications.

In dysfunctional fistulas, the antecubital region should not be used immediately. If possible, the proximal to the established fistula should be evaluated immediately. Prosthetic grafts should be kept in mind as an alternative method, but superficial autologous veins should be the first choice.

Early consumption of AVF access routes in patients at an early age and in patients with poor vascular structure is a condition that puts the lives of patients at risk. For this reason, AVF operations should be performed with meticulous surgery by experienced vascular surgery clinics and vascular surgeons.

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