

MINI CASE STUDY:

Forearm Fistula

Initial Contact

Raj Patel, M.D., a fellowship-trained kidney and liver transplant surgeon at the University of Arkansas for Medical Sciences (UAMS), was called to a dialysis access clinic in Little Rock for an arteriovenous fistula placement consult in advance of a patient beginning kidney dialysis. The procedure joins a vein onto an artery, usually in the arm, to create a large, robust blood vessel to serve as an access point throughout hemodialysis.

Assessment

Patel prefers to start a fistula as low in the patient's arm as possible — in the forearm — so he can later move up, if necessary. First, he assessed the size of the patient's veins and asked which of the patient's hands was dominant, to assure that the fistula will be placed in the non-dominant arm.

Procedure

The outpatient procedure began with the injection of a nerve-blocking anesthetic in the lower neck or shoulder area to numb the nerves leading to the arm. The patient was then transferred to the operating room, where an ultrasound was performed, after which Patel created a two-inch incision. Through the incision, he worked to free up the artery and the vein to connect them together. Then he bandaged the area.

Follow up

The patient returned to the clinic six weeks later, to give the vein time to enlarge and ensure he was ready to begin dialysis.

Discussion

Patel said he prefers to create a fistula in the forearm rather than the upper arm to avoid “burning any bridges,” allowing him to move higher on the arm if blood clots form. He said a fistula provides the lowest risk of infection for dialysis treatments because, unlike when a catheter is used, the dialysis treatment is delivered through the patient's own vein, avoiding any threat of infection from the use of foreign material. Also, the forearm fistula can remain permanently in the patient's arm or, if preferred, can be removed after dialysis is complete. It is created in a procedure that lasts only an hour or two, and then the patient can wait months or even years before beginning dialysis.

Referrals

To refer a patient to Patel, call **501-686-6640** for kidney, **501-686-8962** for liver or **870-541-6000** for the Pine Bluff satellite clinic where he practices the second Tuesday of each month with Mary E. “Mollie” Meek, M.D., an interventional radiologist.

