

# New Patients Needing Dialysis Access, Endovascular Procedures and Revisions

The initial appointment in the office is designed to share information: we get information from you so that we can understand your problem, and we give you information about dialysis, vascular access, and our process for getting your access ready. For first time patients and their families there is a 20-30 minute orientation to vascular access considerations featuring pictures of all phases of the process (the “scary wall” – see image below).



Ordinarily, an ultrasound of one or both arms is done as part of the examination to check on the health and size of your veins and arteries. We consider your vascular assets, and many other factors (such as whether you are right or left handed, have a pacemaker, or have had previous surgery in the arms, and so forth) before we give you information about what we think we can do. This recommendation is informed by 15 years of full-time access work, and consideration of the results we have seen (see experience and results tab). No procedure will be performed in the office other than the ultrasound examination of the arms. Ordinarily one meeting is enough for a recommendation for surgery to be made.

**Scheduling** – for the relatively few percent of the patients we see who are healthy other than their renal failure, a procedure may be offered as soon as a reasonable time in the schedule opens up. In general, shorter, simpler procedures can be squeezed into the schedule sooner than longer, more complex procedures. If your schedule is flexible, and if an earlier opening occurs because of another patient's cancellation, we may be able to get you in earlier.

**Pre-operative testing** – people with a history of coronary artery disease (episodes of chest pain, previous myocardial infarction, congestive heart disease), at risk for same, or with other significant medical history information, may be asked to provide additional medical information, such as any previous cardiac work-up (Ikecho or stress test). We may ask for an x-ray of your veins (a venogram), or evaluation of your arteries in the Vascular Lab. You may even be asked to see your cardiologist or other physician for an valuations prior to surgery. This is for your safety, so that you may have effective anesthesia in the safest possible manner. You can expect a representative of the hospital to call you for a phone interview. Your blood will be tested the day of surgery and an EKG done.

**Day of surgery** – ordinarily, the hospital will call you the day prior to surgery to let you know what time you are expected, normally 2 hours prior to the actual surgical time. Please review the “conditions for having surgery by Dr. Marc Webb” information sheet for many important details and reminders.

**Hospitalization** – in most cases, patients are able to be discharged after their surgery and do not have to stay overnight in the hospital. In a minority of cases an overnight stay will be arranged for medical reasons (monitoring of oozing with a drain, a heparin drip to prevent clots, treatment for nausea, supplemental oxygen, and so on). In most such cases, the patient has dialysis in the hospital if needed the next day, and then can be discharged. Rarely, a patient may stay for several nights until a problem is solved. In other cases, the patient or family may prefer to have the extra security of having the hospital staff look after the patient the first night. If you, or your family, have a strong preference on this matter, please let us know.

**The post-operative period** – patients are urged to respect their injury due to surgery, and to allow themselves time to heal. A certain limitation of activity is wise in order to avoid complications. We advise no heavy lifting, no driving for the first day or while taking narcotic pain medications.

Ordinarily my office will call you in the first 24-48 hours after your procedure to make sure you are doing well. This is a good time to make the return appointment. Assistance is available for emergencies by calling the office phone at 248-355-1100. Listen to the recorded message to the point when a 24 hour contact phone number is listed, and then call that number (it varies depending on who is on call).

The dressing placed at the end of surgery should remain clean and dry. “Dressing changes” are not required unless the bandages become wet, and even then we urge you to call the office for instructions, or arrange to stop by for assistance.

The first post-operative visit, and after – we normally see patients on the Monday or Tuesday two weeks after their procedure for suture removal and assessment. For graft placement, this may be the time when your graft is scheduled for release, and you start planning to get your catheter out.

For fistula patients, this may be only the beginning, as we wait for the fistula to grow big enough to be usable, or to qualify for a second procedure in a two-stage process. We generally see patients every two or three weeks until the fistula is deemed usable.

**Staged procedures and revisions** – Depending on your fistula's particular pattern (deep veins and basilic veins generally will require a second procedure to bring them up to a level just under the skin, and we usually tell you that from the very beginning), the speed of its growth, and on Mother Nature, additional procedures may be recommended to make your fistula usable. Moving the fistula (superficialization and transposition), dilating segments of the fistula with scar tissue or inherent narrowings (venoplasty), or trimming branches to keep the blood in the desired main channel are all common choices to make the fistula usable faster (and to be able to get the catheter out sooner).

**Clearance for the graft or fistula for use** – when the access is ready for use it is formally cleared in an office visit. For fistulas, an ultrasound assisted digital photo diagram (see discussion, and examples) is almost always given to help the dialysis unit understand your fistula. The issue of monitoring and maintenance of the access is discussed, the "Warning signs" sheet is given to the patient for reference, the timing of catheter removal, and the process of future Endovascular intervention discussed in the second major educational section.

**Catheter removal** – When the access is being used regularly without issue, the catheter can be removed. This is a much simpler procedure than putting it in, and there are many options and people prepared to help you get the catheter out. If for some reason you are unable to have your catheter taken out because of inability to use the access, please contact the office within three weeks of it being cleared so that we can identify and hopefully fix the problem.

**Happily ever after** – statistics tell us that the average dialysis patient requires 1.8 procedures per year to keep the access functioning properly. Keep the "Warning Signs" handout handy, be informed about your venous pressures, flows, and needle sites with each dialysis, and track your monthly "Report card" from the unit, which should tell you your monthly "clearance". Call when you experience abnormalities – sometimes we can resolve things on the phone, or at least speed the solution to your problem. There actually is no "Happily ever after" – life is a struggle sometimes, and you have to play smart to stay in the game.