



**Saving Vasculature**  
PICC lines, venapuncture, etc.

**When a patient is identified who is clearly heading towards ESRD  
Plan Ahead!! Determine:**

- **Is the patient a candidate for chronic Hemodialysis?**
- **Is the patient a candidate for chronic peritoneal dialysis?**
- **Is the patient a candidate for a pre-emptive transplant?**

If the patient is a candidate for home therapy, ensure the patient has a chance to be evaluated by your CAPD nurse to see if this is truly an option; If it is an option, and if the patient prefers this route, then one can avoid the issue of a vascular access at this time.

If the patient has a qualified donor, and both donor and recipient have been evaluated by a transplant center, then one can avoid the issue of vascular access at this time.

If the patient is not a candidate for CAPD, and there is not a preemptive donor available, and if dialysis is anticipated within the next 12 months, then vascular access must be addressed and the patient must understand its importance, and the importance of doing it EARLY!

What we as nephrologists can do to help our patients who will someday need vascular access ensure they have the best chance of ending up with a functioning AVF:

1. As noted above, start planning early
2. Instruct the patient to try and avoid phlebotomy and IV's in the non-dominant arm. Reinforce to them that this is the future fistula arm, and the veins need to be saved.
3. If the dominant arm needs to be used, have the patient instruct the phlebotomist, if possible, to avoid the veins that might be used for an AVF such as the cephalic vein in the antecubital fossa or just below or above. This of course is often not possible, but it's always worth a try on a smaller hand vein.
4. In-service the IV teams at your hospitals to try and avoid PICC and MID lines in patients who may someday need a fistula
5. Get the patient to your vascular surgeon of choice early.
6. Ensure the patient gets vein mapping done in conjunction with the visit to the vascular surgeon.
7. Once the fistula is in place, the patient needs to be followed closely by the nephrologists or the vascular surgeon to ensure maturation of the fistula; if the fistula is clearly not maturing in the first 4-6 weeks, an intervention should occur, (fistulogram, perhaps with inflow or outflow angioplasty, side branch ligations, patch angioplasty). If there is no way to salvage this AVF, an attempt at another should be done, perhaps higher up on the arm, a transposition, or moving to the other arm.

Starting this whole process early will give the patient the best chance of starting dialysis with a functioning AVF.

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