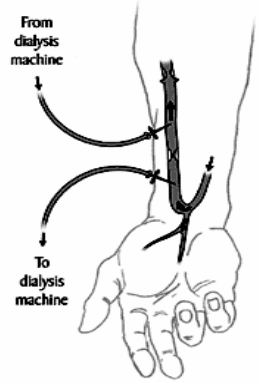
AL RAHBA HOSPITAL
VASCULAR SURGERY
Patient information



Arterio-Venous Fistula

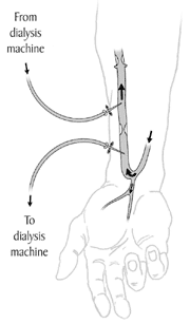
Why patient needs hemodialysis.
Some Patients with End Stage Renal Disease come to the phase when excess of waste products in the body can not be removed due to impaired kidney function. These patients need to be on hemodialysis, where hemodialysis machine function as an artificial kidney. The patient need access for hemodialysis that blood from the patient can circulate into the hemodialysis machine, where the waste products are removed and then return back to the patient.

What is Arterio-Venous Fistula.
Arterio-Venous shunt or Arterio-Venous Fistula is a connection made between artery and the vein where blood from the high pressure system, artery is shunted to the low pressure system, Vein. The vein during the time of 6-8 weeks become dilated and the veins wall become thicker. We call this period "maturation time" for Fistula.
A dilated vain such as this can be easily punctured by the hemodialysis needle.
The shunt is preferable placed in the distal part of the body, wrist, forearm or cubital fossa in non dominant upper limb, in most people left upper limb.

How is the patient assessed before surgery.
Patients are referred by Nephrologists to the Vascular OPD for evaluation and routine blood work up. Some patients have obvious good veins and can be qualified for surgery. Many patients have veins which are not visible and these patients need preoperative US-Doppler evaluation of the veins to decide the site for A-V shunt, wrist, forearm or cubital fossa.

Surgery
The patient undergoes surgery in Brachial Plexus or local infiltration anesthesia. Usually the patient may be discharged the same day in the afternoon or the day after. The need for pain killers is minimal and Paracetamol 1g twice or three times daily for one or two days is sufficient. Follow up in the clinic will be arranged by the Surgeon.

Precautions
No arm punctures are allowed on the side of fistula construction, after the patient was scheduled for surgery. The A-V fistula arm is solely for hemodialysis punctures. Anny blood draws should be done from the opposite side.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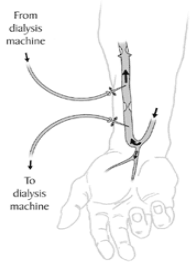
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