

**REGION I EMERGENCY MEDICAL SERVICES  
STANDING MEDICAL ORDERS  
EMT – Paramedic**

**SMO: Arterio-Venous Fistula/ Graft Vascular Access**

**Overview:** Vascular access for dialysis is gained via an AV fistula/graft. **AV fistula/graft should not be accessed unless no other option exists and IV access is essential.**

**OBJECTIVE FINDINGS**

- Hemodynamic unstable patient—IV access is essential.
- Unable to access IV in other patient site.

**EQUIPMENT NEEDED:**

- Universal Precautions for blood and body fluid exposure including sterile gloves
- Betadine swabs
- 4 X 4 sterile dressings
- IV start kit
- 18G angiocath
- IV tubing and bag

**PROCEDURE**

**When the fistula/ graft must be used for IV access:**

- Consult Medical Control for permission to complete procedure.
- Assess fistula/graft for presence of pulsation and bruit.
- Do not use a tourniquet.
- Cleanse fistula/graft with betadine.
- Access fistula/ graft with an 18G angiocath at the most distal aspect of the graft.
- Pierce the skin at a 45 degree angle almost at the level of the fistula/ graft.
- Decrease the angle of the catheter so the needle is almost resting on the skin, and thread the catheter into the fistula/ graft.
- You may have to use a pressure bag around the IV fluid bag to make sure blood doesn't rise into the IV tubing.

7/04

Reviewed:

Revised:

EMS/ Region1 SMOs

**Documentation of adherence to protocol:**

\_\_\_ Reason for procedure (unable to secure IV site in other location and IV site is essential) including physical findings

**Medical Control Contact Criteria**

\_\_\_ \* Contact Medical Control if any question arise regarding the best treatment options for the patient including necessity of accessing the fistula/ graft.

**PRECAUTIONS AND COMMENTS**

- **AV fistula/graft should not be accessed unless no other option exists and IV access is essential.**
- Because of the arterial pressure in this site, bleeding is a real complication. Be prepared to apply pressure to control bleeding.
- Because of the arterial pressure at this site, a pressure bag will most likely be required to prevent blood from traveling up the IV tubing.