

ANNUAL DIALYSIS COUNCIL Long Beach, CA

Access Infiltrations

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ADC

- I have no disclosures

ADC

- OBJECTIVES
- 1. You should be able to identify your role in caring for infiltrations
- 2. Recognize changes you make to improve infiltration care

Risk Factors & Consequences

- A major complication of unsuccessful access cannulation, is a needle infiltration resulting in development of a subcutaneous hematoma and precluding access use until resolution of the hematoma
- Infiltrations may result in the temporary inability to use an access ,and may lead to thrombosis ,necessitating tunneled catheter use for maintenance hemodialysis

INFILTRATION

- Needle infiltration of AVF is a common problem
- More common in elderly and new accesses
- The creation of a Fistula is not a guarantee that you will have an ACCESS free from problems
- Every cannulator has had it happen to them



Original image courtesy of Forest Rawls

INFILTRATION

- A patients fear and a cannulators nightmare
- An infiltration occurs when the fistula needle goes in the access and then out the other side, as a result the blood will leak into the surrounding tissue
- It can happen before,during and after the dialysis procedure,and will cause pain and swelling





INFILTRATION

- Do not insert the needle no further than 1/8 inch beyond the point where a blood flashback is first seen
- Level the needle to the surface of the skin and advance it slowly leave a small portion of the needle visible(to prevent hubbing)
- IF RESISTANCE IS FELT,THE NEEDLE SHOULD BE PULLED BACK AND ANGLE REDIRECTED

INFILTRATIONS

- Don't flip needles (NEVER NEVER)
- Don't lift needle in vein
- Flush with NSS

PREVENTION TECHNIQUES

- Be careful when taping needles ,and avoid lifting up on the after it is in the vein because a needle flip or movement can cause an infiltration
- Apply the guaze dressing over the needle site,but do not apply pressure
- Using too steep of an angle during needle removal may cause the cutting edge to puncture the vein wall

PREVENTION

- Always CHECK FOR FLASHBACK AND ASPIRATE
- Flush with NSS to ensure the needle flushes with ease and no signs of infiltration
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TREATMENT

- The proper way to treat an infiltration is to remove the needle, apply ice
- If the patient has received heparin you can tape and leave in place
- If the infiltration continues to increase in size /and or is extremely painful, the needle should be removed
- Attempt to cannulate above the site

TREATMENT

- Elavate arm above the heart
- Let fistula rest
- Second infiltration (CONTACT VASCULAR ACCESS TEAM)

PREVENTIVE MEASURES

- The preventive measures should require
Only staff who have been appropriately trained and observed for technical mastery to cannulate new accesses
- If possible create a cannulation team to eliminate some potential problems
- Establish protocols to minimize vessel damage

ACCESS TOOL BOX

- When possible consider marking the sites with the aid of ultrasound. Veins that are difficult to see and feel, will show themselves
- New handheld models are now available
- Always encourage self cannulation
- Button hole technique may be less likely to infiltrate/but infections are the main deterrence

DOPPS INFORMATION

- New data tells us that a functional outflow vein can be cannulated 1 month postoperatively
- Previous KDOQI guidelines recommendation of 3-4 months was based as a result of early cannulation failure with resulting tissue infiltrations and vessel damage


