

Two-Step Cleaning Protocol for Buttonhole Sites Prior to Cannulation to Prevent Infections

Procedure	Rationale
1. Have the patient wash their access arm before coming to their dialysis chair.	1. Dialysis patients have more staph on their skin than those without kidney failure. <i>Staph aureus</i> is the leading cause of infection in dialysis patients ¹ .
2. Using your facility's antimicrobial agent, cleanse the buttonhole sites, using a circular rubbing motion.	2. Pre-cleaning buttonhole sites will continue to reduce <i>Staph aureus</i> and help to prevent infection.
3. Remove the scabs from the buttonhole sites using an appropriate technique.	3. Scabs contain <i>Staph aureus</i> from the skin. See attached guide for "Dos & Don'ts of Scab Removal." ²
4. Using your facility's antimicrobial agent, cleanse the buttonhole sites and leave on according to the manufacturer's recommendation.	4. KDOQI™ 2006 Vascular Access Guidelines ³ states to follow manufacturer's guidelines for correct contact time. See attached guide "Preparing the Vascular Access for Cannulation." ⁴
5. Cannulate per facility policy while maintaining sterility of the needles.	5. Contaminated needles and improper needle insertion can lead to tunnel infections and/or sepsis.

1. Kaplowitz, L.G. Comstock, J.A., Landwehr, D. M., Dalton, H.P. and Mayhall, C.G. Prospective study of microbial colonization of the nose and skin and infection of the vascular access site in hemodialysis patients. *Journal of Clinical Microbiology*. 26(7):1257-1262.
2. Ball, L.K. (2006). The buttonhole technique for arteriovenous fistula cannulation. *Nephrology Nursing Journal*, 33(3): 299-305.
3. National Kidney Foundation. (2006). KDOQI clinical practice guidelines and clinical practice recommendations for 2006 updates: Hemodialysis adequacy, peritoneal dialysis adequacy and vascular access. *American Journal of Kidney Disease*, 48: S1-S322, (suppl 1).
4. Ball, L.K. (2007). Preparing the vascular access for cannulation. Retrieved from <http://www.nwrenalnetwork.org/fist1st/cleanaccess.pdf>.

This publication was developed by Northwest Renal Network while under contract with the Centers for Medicare & Medicaid Services, Baltimore, Maryland, Contract #HSM-500-2006-NW016C. The contents presented do not necessarily reflect CMS policy.