

Results from PRO QR Product Trial for PICC Lines at a +800-bed Florida Hospital

Abstract:

A product trial using PRO QR Powder was conducted in November 2007 at a large hospital in Florida with the hospital's Vascular Access Services team. This team of registered nurses (RNs) is in charge of PICC line insertions, maintenance and discontinuation. Standard of care to control bleeding from PICC line insertions prior to this trial was a 4X4 gauze on every PICC insertion site. In approximately 20% of cases hemostatic oxidized cellulose gauze was used to control bleeding. The use of any gauze product requires a 48-hour dressing change per Centers for Disease Control (CDC) guidelines. To address this, PRO QR Powder was used during a 39-day trial for all PICC line insertions (418 total) and for occasional bleeding occurring during dressing changes or line discontinuations.

Results:

The primary objective of the trial was to assess the ability of PRO QR Powder to achieve hemostasis from line insertions and the elimination of the 48-hour dressing change. Secondary objectives included assessing the product for ease-of-use as well as the vascular access site tissue integrity associated with product use. A post-hoc assessment of potential complications such as infection, bleed-through, skin impressions and rash due to the use of PRO QR Powder was also conducted.

Results from this product trial demonstrated an overwhelming majority user-preference for PRO QR Powder relative to the current 4X4 gauze and hemostatic oxidized cellulose gauze (when needed) control standard-of-care. Ninety-eight percent (98%) of all respondents considered PRO QR Powder to be an effective means to control PICC line access site bleeding, while comparable ratings were also assigned for product ease-of-use and product effectiveness scaled rating.

PRO QR Powder effectively stopped bleeding in ≤ 2 -minutes in 94% of all applications. These product trial results had a direct effect on the staff-participants' positive response for the potential nursing efficiencies to be gained with PRO QR Powder use (i.e., elimination of the 48-hour dressing change), and on perceived patient comfort (i.e., decreased manipulations, decreased access site complications, etc.). With respect to site infections or other complications associated with product use, none were recalled or otherwise reported; however, post hoc review of documentation showed an approximate 40% reduction in CRBSIs during and post trial. Lastly, patient demographics had no significant impact on staff user response, thus PRO QR[®] Powder may be assumed to perform equivalently in all ages, sex, race, and concomitant drug therapies.

See reverse side for product trial results.



Results from PRO QR Product Trial For PICC Lines

Account Name:	Hospital A
Location:	Orlando, FL
Vascular Access Team (VAS) (Y/N):	Yes
Teaching Hospital (Y/N):	NO
Bed Size:	881
Date:	12/07

A. PRO QR Efficacy	
<ul style="list-style-type: none"> Time to Hemostasis needed to control bleeding and exudates 	<i>≤ 2 minutes in 94% of applications</i>
<ul style="list-style-type: none"> Time to Hemostasis for patients with clotting difficulties (high PT/INR, low platelets, anticoagulant/antiplatelet therapy) (19% of respondents) 	<i>≤ 2 min. in 96%</i>
<ul style="list-style-type: none"> Time to Hemostasis for patients on anticoagulant/antiplatelet therapies (11% of respondents) 	<i>≤ 2 min. in 94%</i>
B. Assessment of efficacy for bleeding control on patients with “bleeding problems”	98% of respondents agreed PRO QR is effective
C. Comparison to standard protocol: (scale 1-6; 1=poor, 6=excellent)	
<ul style="list-style-type: none"> Efficacy rating for hemostasis 	5.2
<ul style="list-style-type: none"> Rating for ease of use 	4.9
<ul style="list-style-type: none"> Rating for tissue integrity 	5.5
D. Total elimination of 48-hour dressing change	100%
E. Total initial dressing change performed at 7 days	100%
F. Total complication rate	0
G. Reduction in Catheter-Related Bloodstream Infections (CRBSIs)	40%