

ABSTRACT TITLE: Improving Skin Irritation and Dermatitis Induced by Peripherally Inserted Central Catheters in Outpatient Chemotherapy Clinic Patients.

*Phan Dang, RN, BSN, OCN Phan.dang@va.gov

Background: Peripherally Inserted Central Catheter (PICC) is an intravenous line placed into the patient's upper arm to safely administer chemotherapy. For years, many patients receiving chemotherapy through a PICC line in the Outpatient Chemotherapy Clinic developed skin irritation and dermatitis at the insertion site. Interventions included, but were not limited to, corticosteroid spray, anti-histamine, occlusive dressing change, and covering the PICC site with gauze. Sometimes, replacement was needed for severe irritation or infection. These complications can lead to chronic discomfort, hospitalization, and delayed treatment.

Purpose: The purpose of this project was to reduce the incidence of PICC line skin irritation and dermatitis in patients receiving outpatient chemotherapy.

Methods: Nursing procedure required the PICC line dressing to be changed weekly. The site was cleansed with Chlorhexidine, dried, and a Chlorhexidine-soaked sponge was applied at the catheter exit site. The catheter was then secured with a catheter stabilization device and covered with a transparent occlusive dressing. The revised method added Cavilon No-Sting Barrier Film. The film was applied except to the area around the catheter exit site after the Chlorhexidine was dried to create a barrier between the skin and the occlusive dressing. Skin condition was measured using the International Contact Dermatitis Research Group Scoring Scale.

Results: Results were evaluated through retrospective chart review. During the 3-months pre-implementation, 33 PICC lines were placed, 5 were replaced, and 32% had documented skin irritation. During the 3-months post-implementation, 28 PICC lines were placed, 3 were replaced and 4% had documented skin irritation.

Conclusion: The results demonstrate a significant reduction of skin irritation incidence and support the use of Cavilon No-Sting Barrier Film as part of the PICC line dressing change.

Evaluation in different settings with different PICC line populations is needed to fully evaluate efficacy.