

Chlorhexidine (CHG) Bathing to Prevent Hospital Acquired Infections

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BACKGROUND

“Healthcare-associated infections (HAIs) cause considerable morbidity, mortality and medical costs. Annually in the United States, approximately 722,000 people develop an HAI and 75,000 die. A cost analysis by Zimlichman *et al.*, examining five major HAIs, found that HAIs cost the United States healthcare system \$9.8 billion annually” (Musuuza, JS., 2016)

Studies have proven that daily bathing with chlorhexidine gluconate (CHG) is an efficacious intervention for Bloodstream infection (BSI) prevention in the ICU setting. In a meta-analysis of 12 studies that included 137,392 patient-days found a 64% reduction in the incidence of BSIs following daily CHG bathing (Musuuza, JS., 2016)

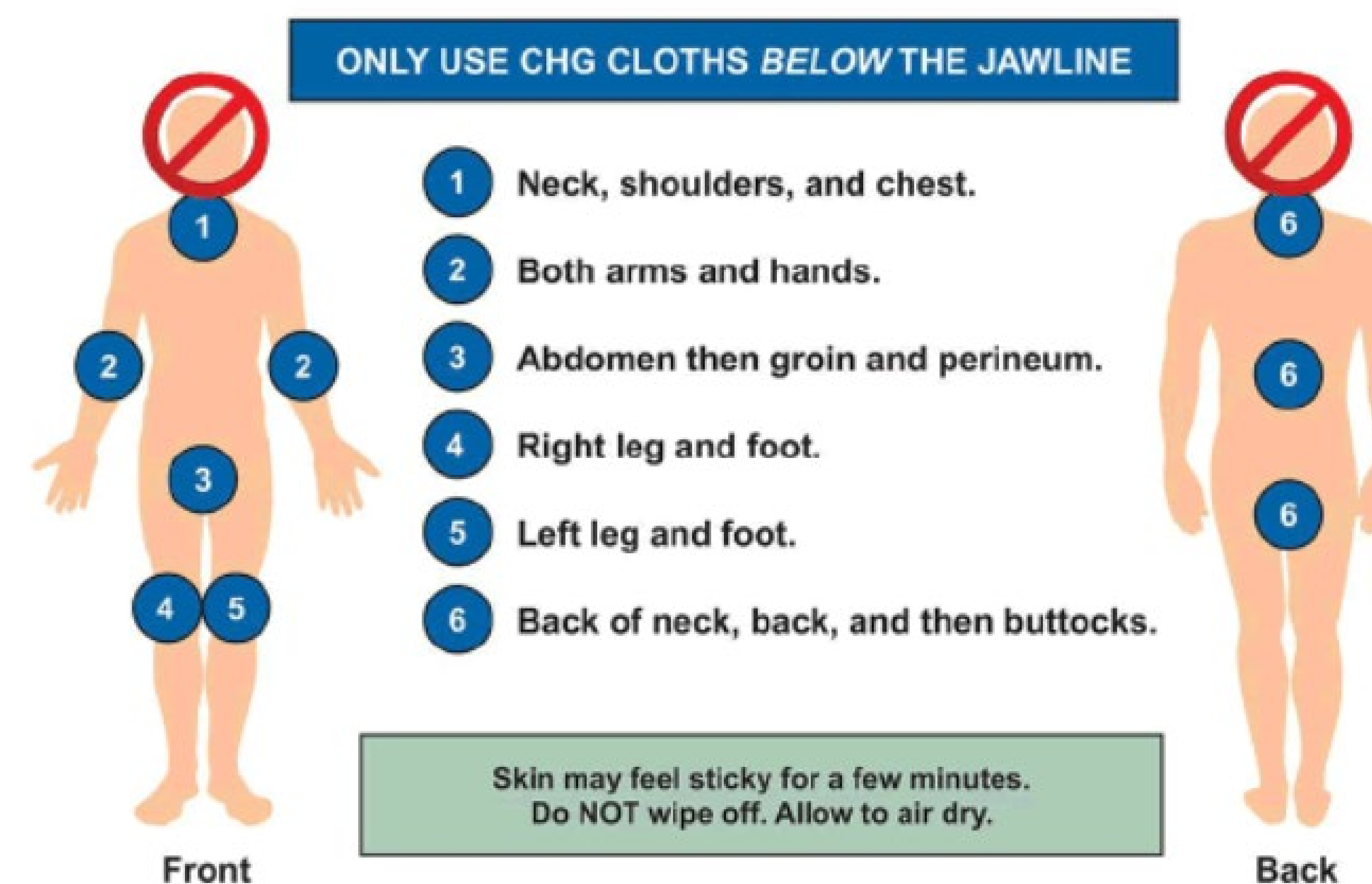
PURPOSE

To strive for standardized, evidence-based clinical practice and nurse-initiated protocols, the 1500 South staff have noticed an increase in Catheter-Associated Urinary Tract infections (CAUTI) and Central Line Associated Blood Stream Infections (CLABSI) in the unit. The goal is to implement protocols to reduce the incidence of these infections.

Chlorhexidine Gluconate (CHG)

Is an anti-bacterial agent	• Bactericidal to many gram-positive and gram-negative bacteria
First introduced in 1970	• Used in hand sanitizers, surgical scrubs, mouth rinses & bathing cloths
Can reduce MRSA & VRE bioload on the skin	• CDC recommends CHG for preventing central line blood stream infections (CLABSI)

CDC, 2012
Climo et al., 2009; Kim et al., 2016
Rubin, Wessels, & Downer, 2013



CHG bathing demonstrated a 24% reduction in CLABSI rates



METHODS

Implementation of daily CHG bathing for all patients who have a central line and/or foley catheter in place. Daily monitoring to assure staff and patient compliance with documentation of outliers. Working with infection control to monitor the effectiveness of CHG bathing.

RESULTS

We hypothesize that the unit will see a drop in the CAUTI/CLABSI rate in the quarters where CHG bathing has been implemented.

CONCLUSIONS

If our hypothesis is correct, that there will be a reduction in CLABSI/CAUTI rates, then we will use our evidence-based research to implement a hospital-wide nurse protocol on daily CHG bathing. This will improve UMC's overall infection rates.

REFERENCES

Musuuza JS, Safdar N. Every other day bathing with chlorhexidine gluconate: what is the evidence? *Ann Transl Med.* 2016 Dec;4(24):506. doi: 10.21037/atm.2016.11.83. PMID: 28149868; PMCID: PMC5233479.

