

What's New in the Patient Safety World

April 2013

Chlorhexidine in the News

In the column above (our April 2013 What's New in the Patient Safety World column "[Reminder: Hand Sanitizers Are Flammable](#)") we mentioned that many of the surgical skin preps used in the OR are potentially flammable. Chlorhexidine preps typically have high concentrations of alcohol and have often been implicated as the fuel in surgical fires. There are less flammable surgical skin preps (eg. povidone-iodine) and there are certain circumstances where povidone-iodine might be the preferred prep (see our April 24, 2012 "[Fire Hazard of Skin Preps, Oxygen](#)"). However, we are always balancing the risk of surgical fires vs. the risk of surgical site infections (SSI's).

There had been some data suggesting that alcohol-based chlorhexidine preparations may be superior to povidone-iodine in preventing SSI's ([Keller 2011](#)) and recently there have been multiple other studies touting the benefits of chlorhexidine in preventing infection.

A recent study performed in ICU's or bone marrow transplant units ([Climo 2013](#)) showed that daily bathing with chlorhexidine-impregnated washcloths significantly reduced the risks of acquisition of multiple drug-resistant organisms (MDRO's) and development of hospital-acquired bloodstream infections.

Similarly, in a multicenter randomized crossover trial in PICU's critically ill children receiving daily CHG bathing had a lower incidence of bacteraemia compared with those receiving a standard bathing routine ([Milestone 2013](#)).

So the evidence seems to be accumulating that preps are very useful in preventing a variety of infections in the hospital. Where the risk of fires is low it probably makes sense to use chlorhexidine as the preferred skin prep.

References:

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