

MANAGEMENT OF HOSPITALISED PATIENTS WITH MRSA Supporting Information

This guideline has been prepared with reference to the following:

Gould FK, Brindle R, Chadwick PR, et al. Guidelines (2008) for the prophylaxis and treatment of methicillin-resistant *Staphylococcus aureus* (MRSA) infections in the UK. *J Antimicrob Chemother* 2009;63:849-61

<http://jac.oxfordjournals.org/content/63/5/849.long>

Washing with antiseptics controls skin carriage of MRSA in surgical patients?

A Cochrane systematic review (Webster, 2015) showed that there was no significant reduction in Surgical Site Infection (SSIs) after using antiseptic wash products (chlorhexidine). This review identified 7 trials of which 3 compared chlorhexidine with placebo (RR of SSI 0.91 95% CI 0.80 to 1.04) and 3 compared chlorhexidine with bar soap (RR of SSI 1.02 95% CI 0.57 to 1.84). Only when compared with no washing did chlorhexidine reduce the risk of SSI (RR 0.36 95% CI 0.17 to 0.79).

Webster, J and Osborne S. Preoperative bathing or showering with skin antiseptics to prevent surgical site infection. *Cochrane Database of Systematic Reviews* 2015, Issue 9. Art. No.: CD004985.

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD004985.pub5/full>

Evidence Level: I

The use of silver dressings is of benefit in MRSA-contaminated wounds and ulcers?

Although the use of silver dressings to inhibit infection has been recognised for centuries (Leaper, 2006), research studies on the subject have been bedevilled by poor design and contradictory results (Chambers, 2007; Hermans, 2006). Furthermore, "little is understood concerning their comparative efficacy as antimicrobial agents" and "their bactericidal and bacteriostatic properties are inferior to commonly used topical antimicrobial agents" (Castellano, 2007). Consequently, the only Cochrane reviews on silver dressings to date (Storm –Versloot, 2010, Vermeulen, 2007; Bergin, 2006) have found insufficient evidence to recommend their use.

A review on the subject (Cutting, 2007) has expressed concern that "The silver-containing dressing segment of the medical device market is of huge commercial importance, and, consequently, marketing and promotional issues occasionally obscure the evidence that clinicians need to have in order that they may provide appropriate treatment for their patients."

A cohort study of 2687 patients who received 3716 episodes of care in the community over a period of four months (Wang, 2007) found that those using silver dressings experienced a higher median number of visits (31 vs 11, $p < 0.0001$) than users of other dressings. The median treatment duration was also greater (97 vs 39 days, $p < 0.001$). The authors called for prospective randomised trials "to produce more reliable evidence".

Bergin SM, Wraight P. Silver based wound dressings and topical agents for treating diabetic foot ulcers. *Cochrane Database of Systematic Reviews* 2006, Issue 1. Art. No.: CD005082

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005082.pub2/full>

Castellano JJ, Shafii SM, Ko F, et al. Comparative evaluation of silver-containing antimicrobial dressings and drugs. *Int Wound J* 2007;4:114-22

Chambers H, Dumville JC, Cullum N. Silver treatments for leg ulcers: a systematic review. *Wound Repair Regen* 2007;15:165-73

Cutting K, White R, Edmonds M. The safety and efficacy of dressings with silver: addressing clinical concerns. *Int Wound J* 2007;4:177-84

Hermans MH. Silver-containing dressings and the need for evidence. *Am J Nurs* 2006;106:60-8

Leaper DJ. Silver dressings: their role in wound management. *Int Wound J* 2006;3:282-94

Storm-Versloot MN, Vos CG, Ubbink DT, Vermeulen H. Topical silver for preventing wound infection. *Cochrane Database of Systematic Reviews* 2010, Issue 3. Art. No.: CD006478.

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD006478.pub2/full>

Vermeulen H, van Hattem JM, Storm-Versloot MN, et al. Topical silver for treating infected wounds. *Cochrane Database of Systematic Reviews* 2007, Issue 1. Art. No.: CD005486

Not found an answer to your question? Wish to suggest an edit to this document?

Please contact the BCGP Clinical Effectiveness Librarian at bedsideclinicalguidelines@uhn.nhs.uk

<http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD005486.pub2/full>

Wang J, Smith J, Babidge W, et al. Silver dressings versus other dressings for chronic wounds in a community care setting. *J Wound Care* 2007;16:352-6

Evidence Level: II (Inconclusive)

**Last amended April 2017
Last reviewed November 2023**