

No basis for recommendation

Expert panel advocates method for applying skin antiseptic agents, but the evidence is still unclear

Dabbing, spraying or smearing? The art world is not the only place where application techniques decide the outcome. However, on walls, it is only the colour impression that counts; in pre-operative skin antisepsis, antimicrobial effectiveness is also influenced by the method used to apply the respective product.

At least this is the case, if an expert panel, which convened in Switzerland in April 2016 to discuss the right application technique, is to be believed. Its conclusions have been published in the current edition of Journal of Hospital Infection [1].

Alcohol-based skin antiseptics are standard when preparing patients for theatre. Two methods are currently used to apply alcohol-based skin antiseptics prior to surgery. In the most commonly used method, the preparation is placed into a kidney dish and distributed over the patient's skin using saturated gauze swabs. In this method, the swabs are drawn in concentric circles working outwards. Alternatively, the preparation can also be applied to the patient's skin using a sponge. Such a sponge is available on the market as a single-use applicator together with the solution. The idea with this product is that the sponge is drawn under pressure back and forth over the intended surgical site.

The expert panel is now recommending dispensing with gauze swabs and using an applicator to apply preparations to further reduce infectious pathogens on the skin and thus minimise the risk of surgical site infections.

What is the basis of this recommendation? Reference is generally made to scientifically comparable studies to justify medical recommendations. But this is not the case here. None of the studies cited by the authors has demonstrated differences in effectiveness that are contingent upon the method of application. Even if the method of application may to all intents and purposes influence effectiveness, the authors are assuming in their recommendation that the 'gauze swab method' per se cannot be standardised, which is also an unjustified assumption.

The authors also lack credibility in listing further advantages of the 'applicator method'. These are not proven by any results and represent speculation; the argument that single-use products are more environmentally-friendly and cut down on waste contradicts practical experience.

Asking the question about the advantages the method of applying skin antiseptics has is entirely justified in order to protect patients against infection. The authors are right that appropriately designed studies are needed in this respect, but such comparative studies should clearly describe and define the methods used. Then, and only then, is it possible to come up with scientifically credible recommendations for practical application.

All the authors on the expert panel were funded by the only company offering the solution with applicator on the market.

[1] Casey AL et al. 2017. Skin antisepsis: it's not only what you use, it's the way that you use it. J. Hosp. Infect. [http://www.journalofhospitalinfection.com/article/S0195-6701\(17\)30233-5/pdf](http://www.journalofhospitalinfection.com/article/S0195-6701(17)30233-5/pdf)