



Title Preoperative Hair Removal

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Reference SMM Report No.2/2000

The prevention of postoperative surgical site infection through preoperative skin preparation has a long history. One of the measures has been hair removal in the operation field, traditionally using a razor (shaving). Since the questions of when and how to remove hair preoperatively have not been subjected to a systematic literature review, we decided to perform an assessment on the topic.

This report is a part of a wider project - Assessment of hygienic measures in operating theatres used to prevent surgical site infections.

A literature search was performed in MEDLINE, Cochrane Trial Register, Embase, CINAHL, Database of Abstracts of Reviews of Effectiveness (DARE), National Health Service Economic Evaluation Database, and Health Technology Assessment Database. The keywords used were “surgical site infection/s OR surgical wound infection/s” AND “depilation OR hair OR shaving”. Reference lists of relevant articles published during the 1990s were searched manually. Ten experts having expertise in surgery, epidemiology, preventive medicine, nursing, microbiology, or statistics assessed all relevant articles and authored the report.

SMM Conclusions

- There is no strong evidence to dissuade preoperative hair removal with respect to surgical site infections.
- Several randomized studies and observational studies with controls show that dry or wet shaving the day before surgery yields a significantly higher incidence of surgical site infections compared to depilation, electrical clipping, or no hair removal.
- Among depilation, electric clippers, or no hair removal there are no convincing differences in effects as regards surgical site infections.
- Hair removal should be done as close to the time of surgery as possible.
- Considerations of cost-efficiency suggest that the hair removal method giving the lowest prevalence of surgical site infections should be preferred.
- These conclusions differ somewhat from those presented in a recent guideline published by the Centers of Disease Control and Prevention (CDC), USA.

The report is available in Norwegian at: www.sintef.nolsmm.