



Evaluating the Financial, Environmental, and Clinical Impacts of Non-Sterile Perianal Procedures: A Local Audit

Matthew Ball¹, Cho Ee Ng¹, Daniel Mattison¹

Correspondence: Matthew Ball, SHO, Warrington Hospital. Email: Matthew.ball14@nhs.net

Abstract

Background: Perianal procedures are typically performed in a sterile setting to reduce postoperative surgical site infections (SSIs). However, a recent study has demonstrated no significant increase in postoperative SSIs when procedures were performed in a sterile versus non-sterile setting. If performed non-sterile, there could be significant financial and environmental savings.

Methodology: All patients who underwent perianal procedures locally were included in this analysis. These patients were categorised as high- or low-risk and elective or emergency cases. Admission records and postoperative SSIs were identified using patients' electronic hospital records. Cost analysis was performed using local purchasing data.

Results: A total of 105 perianal procedures were performed in theatres. Of these, four patients developed a postoperative SSI despite sterile settings, three of whom required a return to theatre. These figures align with findings from previous studies. The financial impact of switching to non-sterile procedures would result in savings of £4,121.25, alongside a significant reduction in the use of single-use items, including 408 drapes, 204 pairs of gloves, and 204 gowns (assuming two scrubbed personnel per case, although three are often present). This would also lead to a substantial reduction in the carbon footprint.

Conclusion: This local audit assessed the incidence of postoperative SSIs when perianal procedures were performed under sterile conditions. The findings suggest that adopting non-sterile techniques for perianal procedures would result in significant financial and environmental benefits. Local policy should be revised to implement non-sterile perianal procedures, with a follow-up audit to monitor postoperative SSI rates and ensure no harm to patients from this policy change.

1. Warrington and Halton Teaching Hospitals NHS Foundation Trust, Warrington, UK

Cite as: Ball, M., Ng, C. E., & Mattison, D. Evaluating the Financial, Environmental, and Clinical Impacts of Non-Sterile Perianal Procedures: A Local Audit. *Impact Surgery*, 2(2), 69. <https://doi.org/10.62463/surgery.156>