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Summary of changes to Surgical Site Infection Getting Started Kit (Updated September 2010)



Antibiotic Prophylaxis

- Cesarean Sections: The SHN! Surgical Site Infection (SSI) faculty added a recommendation that antibiotic prophylaxis be administered prior to first incision rather than after cord clamping¹⁻³
- Tourniquet Use: The SHN! SSI faculty added a recommendation that antibiotic prophylaxis be completed within 30-60 minutes of tourniquet inflation 4-6
- Weight-based Dosing: Added statement recognizing the gap in the literature about weight-based antibiotic prophylaxis. While there is not enough published evidence for the SHN! faculty to recommend weight-based dosing for antibiotic prophylaxis, a list of hospitals are included to show that it is currently an accepted practice in these facilities.
- Single Dose: Reinforced that single dose antibiotic prophylaxis is sufficient for most uncomplicated and non-complex surgeries⁷⁻¹⁷, and that 24 hour antibiotic prophylaxis is recommended for cardiac, thoracic, orthopaedic, and vascular surgery

Antiseptic Prophylaxis

This is a new section in this updated SSI GSK. It highlights that, based on the research available, chlorhexidine-based products should be used to cleanse the surgical patients' skin prior to surgery¹⁸⁻²¹. Further, alcohol-based chlorhexidine solutions are recommended for surgical skin prep²²⁻²⁷ (except in emergent cases). Fire hazards associated with this product and recommendations on how to avoid this are also emphasized in this kit²⁸.

Hair Removal

Hair removal is a bundle item that has been discussed in previous publications of the SSI GSK. In this updated version, the recommendations re-enforce that no hair removal is optimal²⁹, and if necessary clippers may be used to improve visibility of the surgical area - razors are not recommended under any circumstances. New recommendations include:

- Hair should be clipped within 2 hours of surgery²⁹, and should be performed in an area outside of the room where the surgical procedure will be performed²⁸.
- Patients should shower after clipping due to increased risk of bacterial contamination of the surgical site, if possible.

Perioperative Glucose Control

- Previous version of the SSI GSK discussed postoperative glucose control, however this version recommends glucose control for *all* surgical patients who have diabetes or diabetes risk factors (no longer just major cardiac surgical patients) preoperatively, intraoperatively and postoperatively³⁰⁻³¹
- It is reported in the updated kit that the 2009 consensus statement on glycemic control from the American Association of Clinical Endocrinologists and American Diabetes Association recommend that blood glucose levels should be maintained between 7.8 and 10.0mmol/L³².
- The glucose control measurement worksheet has been amended to reflect these changes

Summary of Changes

Perioperative Normothermia

Previous versions of the SSI GSK discussed postoperative normothermia in colorectal or open abdominal patients, however this version recommends that normothermia be maintained throughout the perioperative course for all surgical patients³³. The recommended range of core body temperature to be maintained among surgical patients remains unchanged - 36.0°C and 38.0°C.

- The normothermia measurement worksheet has been amended to reflect these changes

Other Additions to SSI GSK

1. Section added to SSI GSK recognizing the importance of nutrition amongst surgical patients for wound healing³⁴⁻³⁶.
2. Added “Canadian stories” on the topics of antibiotic prophylaxis, antimicrobial prophylaxis, normothermia, and 30-day SSI surveillance.

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