

eP060

ePoster Viewing

Post-surgical and implant infections: from head to knee

STANDARDS OF INFECTION CONTROL TO PREVENT SURGICAL SITE INFECTIONS IN SWITZERLAND: A CROSS-SECTIONAL SURVEY IN 82 HOSPITALS

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Objectives:

Surgical site infections (SSI) are the most frequently observed nosocomial infections in surgical departments leading to substantial morbidity and mortality. Organisations such as WHO, Centers for Disease Control and Prevention and ESCMID provide guidelines to decrease the incidence of SSIs. In Switzerland, Swissnoso, an association of hospital epidemiologists, also published recommendations available online: www.swissnoso.ch.

Compliance with these guidelines was never evaluated on a national scale. Therefore, we designed a questionnaire to estimate the level of compliance with WHO's SSI prevention guidelines as goldstandard.

Methods:

Swissnoso conducts a national SSI surveillance program with 118 hospitals that provide incidence data for SSIs. A pretested, standardized questionnaire was developed with 42 questions and sent to infection control professionals of the hospitals participating in the program.

Participants were asked to estimate the compliance with each item by indicating < 25%, 25-50%, 51-75%, > 75% or unknown. We focused on measures that are modifiable and potential topics for intervention. Estimates were asked separately for different subspecialties such as visceral surgery, cardiac and orthopaedic surgery.

Results:

82 of 118 (69.5%) hospitals responded to the survey: 82 for visceral surgery, 82 for orthopaedic surgery, and 11 for cardiac surgery. Overall, 61.7% of the participants reported a compliance rate > 75% (Table). The percentage varied from 76.9% to 81.8% for hair removal, from 18.2% to 28.0% for disinfection of surgical incision with 3 applications, and from 61.0% to 72.7% for the timing of antibiotic prophylaxis. There were no statistically significant differences between subspecialties.

Problems with intelligibility and handling of the electronic form were encountered despite a dedicated telephone hotline; confirmatory questions and mandatory fields were included to ensure completeness and to prevent contradictory answers.

Conclusion:

Compliance with basic recommendations was lower than expected, and a large variation between hospitals was observed. An intervention plan will be offered to participating hospitals aiming to achieve >90% compliance with all the preventive measures included in the bundle.

Table:

Bundle element	Selected items from survey	Visceral surgery (%) (n=82)	Cardiac surgery (%) (n=11)	Orthopaedic surgery (%) (n=82)	P-value
Hair removal	None or only when interfering with incision site	63 (76.9)	9 (81.8)	64 (79.0)	0.93
	With clippers only	60 (77.9)	9 (81.8)	66 (81.5)	0.49
	Within 4 hours before surgery	68 (82.9)	7 (63.6)	72 (87.8)	0.11
Skin disinfection	3 applications	19 (23.8)	2 (18.2)	23 (28)	0.66
	Done by skilled staff	62 (76.5)	9 (81.8)	67 (82.7)	0.61
	Use of alcohol based chlorhexidine or povidone-iodine	50 (61.0)	9 (81.8)	58 (70.7)	0.23
Anti-microbial prophylaxis	Written protocol for timing	53 (64.6)	8 (72.7)	50 (61.0)	0.67
	Re-dosing after 4 hours	56 (68.3)	6 (54.5)	54 (65.9)	0.66
	Double dosage when body weight > 80kg	9 (11.0)	2 (18.2)	10 (12.2)	0.79