

ORAL PRESENTATION

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Reducing surgical site infections (SSI) in breast surgeries, including a newly identified risk for sentinel node biopsies

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Introduction

In 2012, 19 infections out of 561 breast surgeries (Standardized infection Ratio (SIR) 3.372, 95% CI 2.09-5.168) led to the discovery that non-sterile radiation probes pierced their sterile sheaths. After disinfecting the probes, the SSI was 0%, then subsequently increased.

Objectives

The objective of this study was to identify risk factors for continued infections in 2013 and 2014.

Methods

Rates of SSI were calculated for each surgeon. Case control analyses identified risk factors using R version 3.1.2. Cases were observed and results shared with surgical teams.

Results

Of 26 surgeons, Surgeon X had 33% (386) of the 1169 procedures in 2012-2013 and 52% (13/25) of the infections: the SSI rate was 3.38% (13/384), which was significantly greater than expected 0.32 from the U.S. National Health Safety Network risk adjusted control cases (SIR 3.117 (95% CI 1.73-5.20)).

Surgeon X's sentinel node biopsies in 2014 had a 9-fold increased SSI risk (OR 9.0, Fisher Exact, $p=.051$); several practice variations were observed.

Conclusion

The rate of SSI was reduced to zero in the 4th QTR of 2014, after communicating surgeon-specific rates, possible risk factors, and peer coaching. Practice changes

included high-level disinfection (HLD) of radiation probes used in surgical fields, use of disposable hair bonnets, anchoring drains, and revised prepping.

Disclosure of interest

None declared.

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