Surgical site infection rates in six cities of India: findings of the International Nosocomial Infection Control Consortium (INICC).

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Abstract

BACKGROUND: Surgical site infections are a threat to patient safety. However, in India, data on their rates stratified by surgical procedure are not available.

METHODS: From January 2005 to December 2011, the International Nosocomial Infection Control Consortium (INICC) conducted a cohort prospective surveillance study on surgical site infections in 10 hospitals in 6 Indian cities. CDC National Healthcare Safety Network (CDC-NHSN) methods were applied and surgical procedures were classified into 11 types, according to the ninth edition of the International Classification of Diseases.

RESULTS: We documented 1189 surgical site infections, associated with 28 340 surgical procedures (4.2%; 95% CI: 4.0-4.4). Surgical site infections rates were compared with INICC and CDC-NHSN reports, respectively: 4.3% for coronary bypass with chest and donor incision (4.5% vs 2.9%); 8.3% for breast surgery (1.7% vs 2.3%); 6.5% for cardiac surgery (5.6% vs 1.3%); 6.0% for exploratory abdominal surgery (4.1% vs 2.0%), among others.

CONCLUSIONS: In most types of surgical procedures, surgical site infections rates were higher than those reported by the CDC-NHSN, but similar to INICC. This study is an important advancement towards the knowledge of surgical site infections epidemiology in the participating Indian hospitals that will allow us to introduce targeted interventions.

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