

Occurrence and risk factors for surgical site infection following caesarean delivery: a hospital-based case-control study.

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Abstract

Abstract Objective To examine the occurrence and independent risk factors for surgical site infection (SSI) after caesarean section (CS). **Design** A hospital-based case-control study. **Setting** University Hospital. **Population** Women who were readmitted with SSI after CS during the years 2014-2016 (n=75). Controls were selected at a ratio of 2:1 (n=148). **Methods** Cases (women with SSI following CS) and controls (women without SSI following CS) were compared with respect to maternal and pregnancy characteristics using multivariable logistic regression analysis. **Main Outcome Measures** Anticipated risk factors for SSI. **Results** The occurrence of SSI requiring rehospitalisation was 0.38% and 5.5% after elective and emergency CS, respectively. Obesity was four times more common in women with SSI than in women without SSI (OR 4.1, 95% CI 1.5-11.3). Signs of infection during labour was almost five times more common (OR 4.7, 95% CI 1.7-13.0). Attempted vaginal delivery by pushing before CS was more than five times more common (OR 5.6, 95% CI 1.3-24.3). Pre-existing psychiatric disease was a significant predictor for SSI. **Conclusions** Emergency CS was a significant characteristic for SSI. Obesity, signs of infection prior to delivery, attempt of vaginal delivery by pushing before CS and pre-existing psychiatric disease, were independent risk factors for SSI. Women with either of these risk factors should be carefully monitored and evaluated for signs of infection in the postpartum period.

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