

**P1140**

**Paper Poster Session**  
**Surgical site infection**

**Gentamicin-collagen sponges for the prevention of surgical-site infections: a meta-analysis of randomized controlled trials**

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**Background:** To study the effectiveness of gentamicin-collagen sponges (GCSs) for the prevention of surgical-site infections (SSIs).

**Material/methods:** A systematic search of Pubmed and Scopus databases was performed (up to 04/2015) to identify randomized controlled trials (RCTs) evaluating the efficacy of GCSs for the prevention of SSIs. A random effects model was applied.

**Results:** Twenty-one RCTs (8472 patients) were included. Gentamicin-collagen sponges were associated with lower risk for SSIs compared with the control group [risk ratio (RR) 0.65, 95% confidence interval (CI) 0.49–0.84]. Based on Jadad scores, a lower risk for the development of SSI was presented in lower-quality studies (Jadad <3, 0.44, 0.27–0.71) but no difference was observed in high-quality studies (Jadad ≥3, 0.77, 0.58–1.02). No difference was observed in all-cause mortality in the GCSs group compared with the control (0.77, 0.56–1.06).

**Conclusions:** When accounting for lower quality studies or only for clean procedures, GCS significantly reduce the risk. Further high-quality randomized studies are needed to further test the benefit of GCS whether or not they can impact upon mortality rates.