Recently published randomized trials examining skin closure technique on postcesarean wound complications have produced conflicting results. We performed a metaanalysis of trials comparing [metal] staples and subcuticular sutures for skin closure at cesarean section (CS). Pooled outcome measures were calculated using random effects models. Primary outcomes were rates of wound dehiscence (separation) and a composite wound complication rate. Secondary outcomes were patient satisfaction, operating time, and postoperative pain. A total of 877 women from 5 trials were included. Both wound separation (pooled odds ratio, 4.01; \( P < .0001 \)) and composite wound complication (pooled odds ratio, 2.11; \( P < .003 \)) rates were higher with [metal] staples. The use of [metal] staples reduced operating time (weighted mean difference, –5.05 minutes; \( P < .021 \)). Data on postoperative pain and patient satisfaction were insufficient for metaanalysis. Our findings suggest a possible benefit with subcuticular sutures compared to [metal] skin staples for skin closure at CS. However, the optimal skin closure technique at CS demands further study.

Quote: Both wound separation and composite wound complication rates were higher with [metal] staples.