

Cesarean section skip prep - does skin preparation pattern affect skin bacterial burden, in patients with BMI greater than 30

Gabriela Gaudier-Alemany, MD¹, Megan Piacquadio, DO¹, Sean Cronin, MD¹, Kate Stamper, DO, FACOG¹

1. Jefferson-Einstein Medical Center

Abstract

INTRODUCTION: Currently there is no study investigating optimal skin preparation patterns prior to cesarean deliveries. As a result, many practitioners perform skin preparation using random, unstudied patterns. The most widely used topical skin preparation is Chloraprep and the manufacturer has not recommended a specific pattern to use. This study aimed to look at topical skin preparation patterns prior to cesareans to investigate if one prep pattern is superior to another.

METHODS: IRB #2019-165. The study was conducted at one institution, Albert Einstein Medical Center Philadelphia, over two years. 64 patients who met criteria were consented and enrolled in the study, randomly assigned into one of two skin prep patterns. The skin was prepped using 2 Chloraprep sticks following one of the two patterns. A culture swab was then used across the suspected incision site sterilely and sent to the lab. Growth was monitored for 3 days. The data was sent to the statistician who compiled the information including various patient factors.

RESULTS: Out of 64 participants, there were 5 cultures that had growth of any kind – 3 with pattern A and 2 with pattern B. Moreover, 94% and 90% of participants in arms A and B respectively did not have any growth on the cultures at all.

CONCLUSION: There was no significant difference in infection rate in either of the two prep patterns meaning most prep patterns most likely are appropriate to be used prior to a c-section. In the future, different prep patterns could be studied.