"PREVENTING INFECTION AFTER CESAREAN DELIVERY: 5 MORE EVIDENCE-BASED MEASURES TO CONSIDER"

KATHRYN E. PATRICK, MD; SARA L. DEATSMAN, MD; AND PATRICK DUFF, MD (DECEMBER 2016)

Should we change instruments and gloves after closing the uterus?

In reference to the recent article series on preventing infection after cesarean delivery by Drs. Patrick, Deatsman, and Duff, what are the thoughts on using clean instruments and changing gloves after closing the uterus?

Gerrit J. Schipper, MD Frederick, Maryland

» Drs. Patrick, Deatsman, and Duff respond:

We appreciate Dr. Schipper's thoughtful question concerning our recent articles. At present, we are not aware of any rigorous studies that have evaluated the possible protective effect of changing to a different set of surgical instruments after closure of the uterus.

The second part of the question concerning the effect of changing gloves at a certain point in the operation is more intriguing. In an earlier report from our institution, we showed that the dominant hand of the operator becomes heavily contaminated with bacteria during the process of extracting the fetal head from the lower uterine segment.¹ The contamination is particularly heavy when the patient has had an extended duration of labor in the presence of ruptured membranes. In a subsequent investigation, we showed that avoidance of manual extraction of the placenta, a process in which the now-contaminated glove of the operator is placed between the placenta and the uterine wall, significantly reduced the frequency of postcesarean endometritis even in patients who already were receiving systemic antibiotic prophylaxis.² Whether changing gloves after delivery of the baby will further decrease the frequency of postcesarean endometritis, beyond that which can be achieved with systemic antibiotic prophylaxis combined with delivery of the placenta by traction on the cord, has not been studied in a systematic manner.

Given the low frequency of infection that can be achieved with these 2 methods, it would require a very large sample size to show that glove change offered an additional protective effect. Nevertheless, on a practical basis, we think it is very reasonable to change the glove on the dominant hand following a difficult extraction of the presenting part in a patient who has had an extended duration of labor and ruptured membranes. The glove change is particularly important if manual extraction of the placenta is contemplated.

Of note, we would like to acknowledge that the US Food and Drug Administration finalized a ban on the use of powdered surgical gloves effective January 18, 2017.³ The aerosolized glove powder on latex gloves contains proteins that can provoke severe respiratory allergic reactions in patients who are sensitive to latex. Even powdered synthetic gloves can cause airway inflammation, wound inflammation, and postoperative adhesions.

References

- Yancey MK, Clark P, Duff P. The frequency of glove contamination during cesarean delivery. Obstet Gynecol. 1994;83(4):538-542.
- Lasley DS, Eblen A, Yancey MK, Duff P. The effect of placental removal method on the incidence of postcesarean infections. Am J Obstet Gynecol. 1997;176(6):1250-1254.
- 3. US Food and Drug Administration. Banned devices; powdered surgeon's gloves, powdered

patient examination gloves, and absorbable powder for lubricating a surgeon's glove. Final rule. Fed Regist. 2016;81(243):91722-91731.

"DOES ONE PARTICULAR
CESAREAN TECHNIQUE
CONFER BETTER MATERNAL
AND NEONATAL OUTCOMES?"

JOHN M. THORP JR, MD (EXAMINING THE EVIDENCE; NOVEMBER 2016)

Choosing a cesarean technique based on "evidence"

I appreciate the commentary by Dr. Thorp concerning cesarean delivery techniques. I have always thought that there was no difference in the outcomes of the various techniques. However, we will continue to waver to the peer pressure of this evidence-based stuff—until we find out later, like now—until things change again. "The more things change, the more they remain the same."

Dr. Smart Ebinne Port Harcourt, Nigeria

"YOUR PATIENTS ARE TALKING: ISN'T IT TIME YOU TAKE RESPONSIBILITY FOR YOUR ONLINE REPUTATION?"

RON ROMANO AND NEIL H. BAUM, MD (NOVEMBER 2016)

Eschews meaningless Internet obfuscation

As a practicing physician I don't have time for social media and its accompanying advertising rationale; it's a wasteland that replaces television. My patients and I go one-on-one, eye-to-eye, and eschew meaningless Internet obfuscation. Don't we have better things to do with our physician/patient relationship than check online reviews?

Warren Kendall, MD Grants Pass, Oregon