

[Azithromycin prophylaxis reduces postcesarean infections](#)

Cesarean delivery is the most common major surgical procedure and is associated with a rate of surgical-site infection (including endometritis and wound infection) that is 5 to 10 times the rate for vaginal delivery. Despite routine use of antibiotic prophylaxis (commonly, a cephalosporin given before skin incision), infection after cesarean section remains an important concern, particularly among women who undergo non-elective procedures (i.e., unscheduled cesarean section during labor, after membrane rupture, or for maternal or fetal emergencies). As many as 60 to 70% of all cesarean deliveries are non-elective; postoperative infections occur in up to 12% of women undergoing non-elective cesarean delivery with standard pre-incision prophylaxis.

Azithromycin is an antibiotic used to treat many different types of bacterial infections, such as respiratory infections, skin infections, ear infections, and sexually transmitted diseases. Its common side effects include nausea, vomiting, diarrhea and upset stomach.

In this study they evaluated the benefits and safety of azithromycin-based extended-spectrum prophylaxis in women undergoing non-elective cesarean section. They found that the addition of azithromycin to standard regimens for antibiotic prophylaxis before cesarean delivery may reduce the rate of postoperative infection.

In this trial 2013 women having an unplanned cesarean were randomly assigned to receive standard prophylaxis plus azithromycin or standard prophylaxis plus a placebo. Women with scheduled cesareans and with chorioamnionitis were not included in the study, so the results may not be generalizable to them. The primary outcome was a composite of endometritis, wound infection, or other infection occurring within 6 weeks. The results were that the primary outcome occurred in 62 women (6.1%) who received azithromycin and in 119 (12.0%) who received placebo (relative risk, 0.51; 95% confidence interval [CI], 0.38 to 0.68; $P < 0.001$). There were significant differences between the azithromycin group and the placebo group in rates of endometritis (3.8% vs. 6.1%, $P = 0.02$), wound infection (2.4% vs. 6.6%, $P < 0.001$), and serious maternal adverse events (1.5% vs. 2.9%, $P = 0.03$). There was no significant between-group difference in a secondary neonatal composite outcome that included neonatal death and serious neonatal complications (14.3% vs. 13.6%, $P = 0.63$). In addition, serious maternal adverse events were less common in the azithromycin group. Adverse events among newborns in both groups were comparable.

As a conclusion azithromycin reduced the incidence of post non-elective cesarean infection with unknown mechanism of action, more studies needed to know its exact mechanism of action and to evaluate the use of it for women undergoing a scheduled cesarean section .

References:

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