

Rational and Prophylactic Effect of Preoperative Antibiotics for Postpartum Endometritis and Wound Infection in Women undergoing Cesarean Section

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ABSTRACT

Post-cesarean endometritis and wound infection have been documented as a common complication, with a high incidence of 10 to 25% in national statistics. Various types of antibiotics have been used as prophylactic agents, demonstrating their efficacy even in low-risk surgeries, as reported in different statistics in which the prophylactic antibiotic has been used. In our hospital, a high rate of cesarean operations, almost 46% of deliveries. Prophylactic antibiotic administration can prevent endometritis and lead to considerable decrease in hospital stays and cost of surgeries and management with multiple antibiotic treatment regimens postoperatively for the infected patient. Therefore, we tried to assess the rational and justification of using antibiotic before surgery as prophylactic measure of postoperative endometritis that complicated cesarean sections in our setting. Hence, we conducted this prospective, clinical trial on two groups of women who were delivered with cesarean sections. The first group received prophylactic antibiotics preoperatively and the patients in the second group were not. All patients were followed up and their outcomes were reported. We found that administration of antibiotics preoperatively was significantly reduced the incidence of postpartum endometritis by almost 57% compared to control group. Also, there was a reduction in the incidence of wound infection by almost 60%. However, prophylactic antibiotics did not affect the incidence of neonatal sepsis or need for admission to the neonatal Intensive Care Unit (NICU). In conclusion, administration of antibiotic preoperatively had a significant role in reducing postpartum endometritis and postoperative wound infection in both elective and emergency cesarean sections

Keywords: Cesarean section, Antibiotics, Prophylaxis, preoperative, Endometritis, infection

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