UDC: 616-089.888.61:615.33 doi: 10.5633/amm.2025.0101

## ELECTIVE CAESAREAN SECTION AND MODALITIES OF ANTIBIOPROPHYLAXIS

Predrag Vukomanović<sup>1,2</sup>, Jelena Milošević-Stevanović<sup>1,2</sup>, Milan Stefanović<sup>1,2</sup>, Aleksandra Petrić<sup>1,2</sup>, Ranko Kutlešić<sup>1,2</sup>, Milan Trenkić<sup>1,2</sup>, Sonja Pop-Trajković<sup>1,2</sup>, Dejan Mitić<sup>1,2</sup>, Aleksandar Živadinović<sup>2</sup>, Vladimir Cvetanović<sup>2</sup>, Ivana Conić<sup>3</sup>

Caesarean section (CS) is an often necessary operation widely used in obstetrics. After CS, infectious morbidity is the most common complication. The study aimed to compare the effectiveness of a single dose of ceftriaxone intraoperatively (2.0 g) with a three-day regimen of ceftriaxone postoperatively (2.0 g/24 h) in the prevention of postoperative complications in patients undergoing elective CS. This research included 68 patients for an elective CS. Patients were divided into two groups of 34 subjects randomly assigned to receive ceftriaxone in the form of a single dose (2.0 g) intraoperatively, or three-day ceftriaxone (2.0 g/24 h) postoperatively. A CS was performed using standard technique. Postpartum complications were recorded. An examination, microbiological diagnosis, and adequate dressing of the wounds were performed. At discharge, patients were instructed to report any irregularities. The results were statistically processed. Postpartum complications occurred in 7 patients in the first group, 5 patients had fever and 2 did not have fever. Of the 5 febrile patients, 3 had wound infection, 1 endometritis, and 1 transient postpartum febrility. In the second group, 9 patients had complications, 6 patients had fever, and 3 had no fever. Of the 6 patients with fever, 3 had wound infection, 1 had endometritis, 1 had urinary infection, and 1 transient postpartum febrility. There was no reduction in the incidence of postoperative morbidity in patients who received ceftriaxone in a three-day regimen. Results showed that the three-day use of antibiotics was unjustified because it did not reduce the risk of postoperative morbidity. The prophylactic administration of antibiotics in elective CS is the most adequate modality of antibiotic administration. Research indicates the benefit of intraoperative monodose administration after umbilical cord clamping.

Acta Medica Medianae 2025;64(1):5-11.

**Key words:** antibiotic prophylaxis, caesarean section, endometritis, infective morbidity