

## **ABSTRACT**

**Objective:** The aim of this study was to evaluate the incidence of post-cesarean infections at the Department of Gynaecology and Obstetrics at the University Hospital in Hradec Kralove, including spectrum and seriousness of infections. And to identify independent risk factors for infections. In Czech republic, no study have been conducted on post-cesarean infections.

**Methods:** Prospective descriptive clinical study. 357 consecutive women had cesarean section from January to June 2013 (32%). 13 women with the presence of any infection before an operation, and 45 lost women were excluded from the study. A total of 299 women were included in the study. Prophylactic antibiotics were given to all women. Cases of post-cesarean infections were verified by chart review using the definitions from the Center for Disease Control, Atlanta, USA, as an infection occurring within 30 days after a surgical procedure. Comparisons between groups were obtained by Fisher's exact test. Significant association was defined as a p-value of less than 0.05. Results are reported with 95% confidence interval.

**Results:** Of 299 women having cesarean section, 10 women (3,3%) had a post-cesarean infections. Nine women had a surgical site infection and one woman had an urinary tract infection. The incidence of surgical site infections only was 3,0%. Four of surgical site infection were superficial, and five were endometritis. One case of the endometritis was complicated by a peritonitis. The median time from cesarean section to the development of post-cesarean infections was 14 days. Eight of the cases (80%) were detected after hospital discharge. One patient was rehospitalized, two patients were reoperated, no patient had hysterectomy or adnexectomy and no patient died. One woman was treated without antibiotics, seven women with systemic antibiotics, and two women had the reoperation plus systemic antibiotics.

**Conclusion:** The incidence of the post-cesarean infections was very low. The most of them was surgical site infections. The incidence was about four times less compared to foreign studies. This low incidence was achieved with profylactic antibiotics were given after the umbilical cord was clamped. 2 significant independent risk factor were found: body mass index over 30 and an opening of the cervix during birth.