Introduction/Background Reports on outcomes and the impact of mode of delivery on the clinical course of cervical high-grade squamous intraepithelial lesions (HSIL) during pregnancy and the postpartum period are limited and inconsistent.

Methodology Data of 35 pregnant women with morphologically verified cervical HSIL who were referred to Outpatient Department at NN Alexandrov National Cancer Centre between 2006 and 2021 were retrieved. Median age was 31 (range, 23–43) years. Median weeks of gestation at first examination during pregnancy was 17 (range, 8–34). The progress and outcomes of cervical HSIL and the association with delivery mode were retrospectively analyzed.

Results Median of follow-up was 49 (range, 5.8–162) months. Among 35 women, 24 (68.5%) delivered vaginally and 11 (31.5%) underwent caesarean section. Data of postpartum biopsy or morphology of resected cervical specimen were evaluated from all patients. Postpartum regression of HSIL was noted in 9 cases (25.7%), persistence – in 26 (74.3%). There was no progression of HSIL into invasive cancer during pregnancy. Postpartum regression of HSIL was reported in 7 women who gave birth vaginally (7/24, 29.2%) and in 2 (2/11, 18.2%) women who had a caesarean section (p = 0.685). Among women who delivered vaginally and by caesarean section, 17 (17/24, 68.0%) and 9 (9/11, 81.8%) women, respectively, had persisted lesions after delivery (p = 0.685).

Conclusion According to our data, postpartum regression of HSIL was noted in every fourth case (25.7%). The higher rate of regression of HSIL (29.2% vs 18.2%, p = 0.685) and the lower rate of persistent lesions (68.0% vs 81.8%, p = 0.685) in association with vaginal delivery compared with cesarean section were established. None of the women had progression of the invasive disease. Despite the small number of patients, postpartum results suggest that the presence of HSIL in pregnant women is not an indication for caesarean section.