



Abstract 2022-RA-598-ESGO Figure 2 Evolution in oncological management (A), obstetric outcome (B) and obstetric and neonatal complications © in pregnant cancer patients over 25 years (1996–2021)

Methodology Women with a primary or recurrent invasive cancer during pregnancy or women who were pregnant while receiving invasive cancer treatment between 1996 and 2021 were selected from the INCIP database. Descriptive statistics on oncological diagnosis, stage, antenatal treatment, obstetric and neonatal outcomes, and reported complications was performed. Proportions of events were estimated per 5-year time period with 95% confidence intervals using logistic regression models. A logistic regression model was used to explore the relationship between cancer stage and type, antenatal treatment and obstetric outcome [preterm premature rupture of membranes (PPROM), (planned or spontaneous) preterm delivery, small for gestational age (SGA), other obstetric or medical complications, admission in the neonatal intensive care unit (NICU)], pregnancy loss (miscarriages and stillbirths) and maternal death. Multiple imputation was used to deal with missing data.

Results In the pregnant cancer population (n=2174), preterm delivery(47%), delivery by cesarean section (45%), planned delivery(65%), SGA(27%), maternal death (2%) and NICU admission (33%) are common. Over time, more women

received antenatal chemotherapy(p<0.001), associated with an increase in SGA(p=0.07), spontaneous preterm delivery (p=0.009) and medical complications (p=0.002), and a decrease in elective preterm delivery(p<0.001), NICU admission (p=0.044) and neonatal complications(p<0.001). Most important prognostic factors for adverse outcomes were hematological cancers [maternal death OR 8.0,95%CI(2.7–23.5), p<0.001], metastatic disease [maternal death OR 7.0,95%CI (3.7–13.4),p<0.001, pregnancy loss OR 2.2,95%CI(1.5–3.2), p<0.001] and antenatal chemotherapy [PPROM OR 2.6,95% CI(1.9–3.5),p<0.001, SGA OR 1.6,95%CI(1.3–2.1),p<0.001, other obstetric complications OR 1.6,95%CI(1.2–2.2),p=0.003]. **Conclusion** Antenatal chemotherapy will put a pregnancy at risk of complications and pregnant cancer patients should be managed in high risk obstetric units.

2022-RA-635-ESGO EVALUATION OF SERUM HE4 AND CA125 LEVELS IN THE EARLY POSTPARTUM PERIOD

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10.1136/ijgc-2022-ESGO.371

Introduction/Background This study was conducted to analyze CA125 and HE4 levels in the early postpartum period

Methodology In a prospective study (OB/GYN Department, General Hospital, Celje, Slovenia) 277 women who were in the 1st-3rd day of postpartum period were included in the study. Biomarkers were analyzed with regard to each day of postpartum period (1st, 2nd and 3rd day after delivery) as well as regarding the method of delivery (vaginal delivery, elective and emergency cesarean section). CA 125 and HE4 were evaluated in consideration of their reference intervals, ≤ 35 IU/ml and ≤ 140 pmol/l (Elecys CA 125 II[®] assay and Elecsys HE4[®] assay, Roche Diagnostics Ltd.).

Results Biomarkers levels with regard to method of delivery. Women in the vaginal delivery group had significantly higher levels of CA125 than the women in both cesarean section groups (vaginal delivery group, n=144, median=36.9 IU/ml, elective cesarean, n=82, median=28.6 IU/ml and emergency cesarean, n=44, median=26.1 IU/ml, p <.001). All HE4 measurements were within reference range; women in both cesarean section groups had significantly higher levels of HE4 than the women in the vaginal delivery group (elective cesarean, n=86, median=61.0 pmol/l, emergency cesarean, n=44, median=58.0 pmol/l and vaginal delivery group, n=147, median=54.0, p <.001). **Biomarkers levels with regard to each day of postpartum period.** A significant number of women had high levels of CA125 (>100 IU/mL), with a gradual decline during the first three postpartum days. However, there was not a statistically significant difference between groups. Again, all HE4 measurements were within reference range with a statistically significant decline during the second and third day after delivery (1st postpartum day, n=203, median=60.0 pmol/l vs 2nd, n=49, median=51.0 pmol/l and 3rd day, n=25, median=51.0 pmol/l, p <.001).

Conclusion HE4 is more reliable marker of malignancy during the early postpartum period than CA125.