Obstetric outcome in pregnant women with heart disease, a tertiary care center hospital experience in light of ESC guidelines

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Objective. Women with heart disease have an increased risk of obstetric and fetal events, which peaks during labor. The aim of this study was to evaluate pregnancy outcomes of cardiopathic patients followed in a tertiary care hospital in terms of delivery outcome (mode of delivery, rate of cesarean sections and postpartum bleeding) compared to a control group.

Materials and Methods. A retrospective study was conducted at Careggi University Hospital between 2019 and 2021, comparing a cohort of 157 cardiopathic patients (218 pregnancies) to 2662 controls delivered in the same period.

Results. Our population was divided according to mWHO classification of maternal cardiovascular risk: 73 class I, 51 class II, 24 class II-III, 8 class III, 1 class IV. Of 218 pregnancies, 150 were candidated for vaginal delivery, which was successful in 116 patients (77.3%). Although the rate of medical induction resulted similar between the groups, the indication for induction in most of the study group (66.6%) was the cardiac disease alone. Rate of emergency cesarean sections of cardiopathic patients was not higher compared to the control group and were all performed following obstetrical indications. Elective cesarean section was performed for heart disease in 20 cases (29.4%). The difference between the rate of elective cesarean section for other indications was not significant. No differences were found in the rate of postpartum haemorrhage.

Conclusions. Our data confirm that vaginal delivery is affordable in most cases and suggest that a close follow up in a tertiary hospital allow similar outcomes to that of the general population to be reached.