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Original Article

Outcome of Anesthesia and Open Heart Surgery in Pregnant Patients

Alireza Mahoori, MD[1*], Rasoul Farasatkish, MD[2], Nahid Aghdaie, MD[2], Zohre Faritus, MD[2], Golamali Mollasadeghi, MD[2], Fahimeh Kashfi, MSc[2]

[1] *Urmia University of Medical Sciences, Urmia Iran.*
[2] *Iran University of Medical Sciences, Tehran. Iran.*

Corresponding Author:

Alireza Mahoori, *Cardiac Anesthesiologist, Assistant Professor of Anesthesiology, Urmia University of Medical Sciences, Urmia, Iran. Tel: +98 9143416531. Fax: +98 0441 3469935. Email: alimahoorir@yahoo.com.*

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Abstract:

Background: *Cardiovascular disease is an important non-obstetric cause of maternal and fetal /neonatal morbidity and mortality during pregnancy. For a pregnant woman with cardiac disease, the potential inability of the maternal cardiovascular system to contend with normal pregnancy-induced physiologic changes may produce deleterious effects on both mother and fetus. To determine the most frequent surgical indications of maternal and fetal mortality, we studied 15 cases of severe cardiac disease in pregnant women who required cardiac surgical procedures.*

Methods: *In this descriptive study, fifteen pregnant women who underwent cardiac surgery were studied. Maternal age ranged from 27 to 36 years, and gestational age varied from 4 to 22 weeks. Most of the patients were in New York Heart Association Classes II and III. Opioid- based anesthesia with fentanyl citrate (50µ/kg) or sufentanil (5µ/kg) plus low dose of thiopental were used for the induction of anesthesia. During non-pulsatile cardio-pulmonary bypass, core temperature was between 28-36 °C, average CBP time was 61.2±22 min, average aortic cross-clamp time was 34.13±14 min, and mean pump pressure was maintained between 65-80 mmHg.*

Results: *Ten patients had severe mitral valve disease (66.6%), three had aortic valve disease (20%), one had subvalvular aortic stenosis (6.7%), and the remaining one had left atrial myxoma (6.7%). There were five fetal deaths (33.3%) and one maternal death (6.7%).*

Conclusion: *It seems that open heart surgery in the first trimester is very hazardous for the fetus and may lead to fetal death. If possible, surgery should be carried out in the second trimester of pregnancy. The recommendations are simply guidelines because research data and clinical experience in this area are limited.*

Keywords:

Anesthesia ، Cardiac surgical procedures ، Pregnancy

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