



Effects of Vasoactive Medications and Maternal Positioning During Cesarean Delivery on Maternal Hemodynamics and Neonatal Acid–Base Status

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KEYWORDS

- Uteroplacental perfusion • Neonatal acidemia • Peripartum hemodynamics
- Maternal hypotension • Left uterine displacement • Aortocaval compression
- Cesarean delivery

KEY POINTS

- Adequacy of uteroplacental blood flow is the key determinant of exchange of oxygen, nutrients and waste between mother and fetus.
- Placental blood flow is highly dependent on maternal blood pressure because there is limited autoregulation of the placental circulation.
- During the peripartum period, maternal hypotension may occur secondary to the effects of anesthesia, hypovolemia (eg, due to hemorrhage), and aortocaval compression.
- Optimizing maternal hemodynamics during the peripartum period requires optimal selection and use of intravenous fluids and vasopressors, and optimizing maternal positioning to limit vena caval compression.

INTRODUCTION

Acute events during the peripartum period and their management during anesthesia can significantly contribute to the neonate's acid-base status at birth. Maternal hemodynamics, fluid management, choice of vasopressor, maternal positioning and

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