

Abstract # 239

Remifentanil Infusion for Awake Fiberoptic Intubation in an Obstetric Patient

Abstract Type: Case Report/Case Series

Allison J. Lee, M.D., M.B., B.S.; Allison Lee, M.D.; Jennifer Cohn, M.D.; Bruce Saltzman, M.D.
University of Miami Miller School of Medicine

Fiberoptic intubation (FOI) for cesarean delivery requires optimal comfort with minimal depressant effects on mother and fetus. Remifentanil has a fast onset and short duration. Compared with propofol, fentanyl and midazolam,[1-3] it has been reported to provide better conditions for FOI: more patient cooperation, better tolerance of the procedure and better hemodynamics.

Case Report: A 26 yo G6P0413 at 24 wks gestation, was scheduled for emergent cesarean for placental abruption and non-reassuring fetal heart trace. She had congenital hydrocephalus with a ventriculo-peritoneal shunt and scoliosis, post-Harrington rod placement. She had one previous cesarean, under spinal, reportedly after 1 attempt. She had a difficult airway: micrognathia, short thyromental distance (4cm) and MP III.

With a history of easy single shot spinal before, the plan was to reattempt and if difficult, do awake FOI. In the right lateral decubitus position, spinal was attempted. After several attempts, only bone was contacted and the procedure abandoned. She was turned supine and premedicated with glycopyrrolate 0.2 mg iv. The head of the bed was at 45°. A remifentanil infusion was started at 0.2 μg/kg/min for 1 ½ min and then decreased to 0.1 μg/kg/min until intubation.

For topical anesthesia, the patient was asked to “swish” and gargle, 2% viscous lidocaine. Lidocaine ointment 5%, on a tongue depressor, was placed on the back of the tongue for 1 min and similarly, on the right and left sides, as far back as the patient would tolerate. An atomizer was inserted and 4% topical lidocaine sprayed, aiming at the vocal cords. A Williams airway, with lidocaine ointment applied, was placed in the oropharynx. FOI was easy. No oxygen desaturation occurred. Once intubation was confirmed, the patient was laid flat and the abdomen was prepared and draped. Propofol 1 mg/kg iv was given when ready for incision. Surgery was uncomplicated. APGAR scores were 2, 3, 5. The neonate was intubated and transferred to the NICU.

Discussion: Remifentanil provides excellent conditions for awake FOI in pregnancy. The patient is cooperative, with minimal respiratory depression. Our patient remained calm after intubation, allowing us to delay induction until before incision. This decreased exposure of the fetus to volatile agents. Since the patient was already intubated, no muscle relaxants were used, which may be preferable in certain circumstances.

References: