

BACKGROUND

Fetal heart rate monitoring

- Routinely used in obstetric settings to assess fetal well-being.
- Can be applied during non-obstetric procedures to identify potential need for cesarean delivery.
- Changes can be used by anesthesia team to optimize maternal physiology and fetal perfusion.

ANESTHESIA-EMPLOYED FHR MONITORING DURING NEUROSURGERY IN THIRD TRIMESTER

Christian-Michael Gopichand, Patrick Hesketh MD, Jackie Woodruff CRNA DNAP, Willie A. Agee MD PHD

**CASE:
33-YEAR-
OLD G3P2
WITH
DECLINING
VISUAL
ACUITY
AND
VISUAL
FIELD
DEFECT**

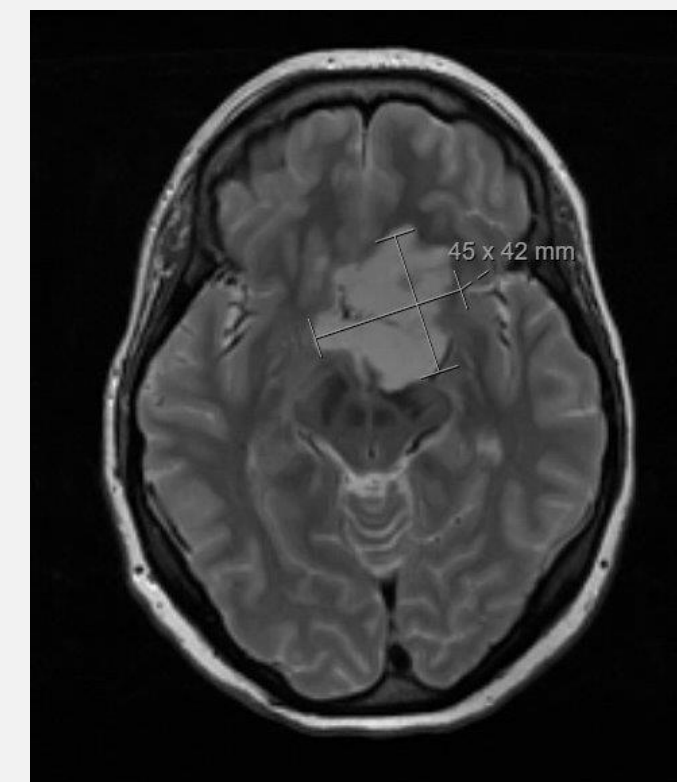
Optometrist noted reduced visual acuity. Referred for further evaluation.

OCT revealed visual field defect and optic atrophy. MRI showed mass effect on anterior left lateral ventricle, optic chiasm, and left optic nerve.

Neurosurgical evaluation recommended surgery to preserve vision.

To OR for tumor resection. Obstetricians declined standard FHR monitoring. Doppler taped to abdomen. FHT audible for assessment. Surgery uncomplicated.

Delivered healthy baby at full term.



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TEACHING POINTS

ACOG guidelines

- Fetus viable.
- C-section feasible.
- Consent and ability to interrupt procure.

FHR monitoring guides anesthesia

- Immediate identification of fetal distress.
- Assists anesthesia team in maintenance of optimal maternal physiology.

Doppler is limited but useful.

- No heart rate variability or digital rate.
- Effective for gross changes in FHT.

