Intraoperative Management of an Undiagnosed Metanephrine-Secreting Tumor during Cesarean Delivery

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SOAP
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SPEAKER DISCLOSURE: I have nothing to disclose.

23-year-old G1P0, 35w1d, sent to L&D triage from her OB office visit for hypertension (office readings 140/90). In triage, she experiences an episode of flushing, headache, and transient blood pressures of 220's/110's.

PREECLAMPSIA ?

- proteinuria (24hr urine collection, protein:creatinine ratio, dipstick)
- thrombocytopenia, renal insufficiency, pulmonary edema, headache
- Severe features SBP > 160 or DBP > 110

PHEOCHROMOCYTOMA ?

- serum or urine metanephrines for diagnosis
- imaging not recommended without positive lab findings
- treatment: 2-weeks alpha blockade prior to surgery

URGENT CESAREAN DELIVERY

Patient Presentation

Dural puncture epidural placed with no medication administration

Two large bore (14g, 18g) peripheral IVs, arterial line placed. Nicardipine, phenylephrine, oxytocin infusions on-line

2% lidocaine with epinephrine administered via epidural catheter to achieve a T4 level.

Initial BP 190/80 of slowly decreased with administration of local anesthetic eventually requiring low dose phenylephrine

Uncomplicated Cesarean delivery. Magnesium infusion for 2 days postoperatively for preeclampsia with severe features.

Plasma metanephrines result 3 times upper limit of normal. CTA/P revealed pelvic mass suspicious for paraganglioma.

Clinical Course

Dural puncture epidural is a safe and effective form of anesthetic management for patients with metanephrine-secreting tumors given no other contraindications

Invasive blood pressure management allowed us to adequately titrate our antihypertensives and vasopressors before and after the sympathectomy caused by epidural anesthetic

Cesarean section or other abdominal surgery risk sudden metanephrine release and hypertensive episode the can cause end organ damage or placental insufficiency

Conclusions