The Dilemmas: Obstetric Anesthesia Case Studies

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Figure 1. Maternal mortality ratio (MMR, maternal deaths per 100,000 live births), 2015

Data Source: World Health Organization
Map Technology: Health Statistics and Information Systems (HSIS), World Health Organization.
Women are dying because society has yet to make decisions that their lives are worth saving
Dr M. Fathalla

Every day, approximately 830 women die during pregnancy and childbirth.
99% of all maternal deaths occur in developing countries.
Between 1990 and 2015, maternal mortality worldwide dropped by about 44%. 
Case #1 - Just let go!

- After morning report at a Hospital in East Africa, we are told that one of the OR’s is needed for a post-partum patient with a retained placenta.
- Unspecified amount of blood loss.
- The patient quickly arrives in the OR with a trail of blood along the way.
- She is helped to the OR table and her legs put in stirrups.

Case #1 - Just let go!

- She is 5’ 3” tall and weighs 250 lbs. her airway is Mallampati 3.
- Obstetrician - “just a little bit of Ketamine”

Case #2 - Born to be free

- You are trying to established a protocol for labor analgesia.
- One of your team members working on the labor ward decides to deviate from the protocol and is using doses of bupivacaine which you feel are too high.
- What do you see as the risks?
- How will this impact future interventions?
- How do you broach this issue?
Case #3 - SHAKE, rattle & roll
A 22-year-old multiparous woman is brought to the theatre for an urgent cesarean delivery for severe preeclampsia.
She has a BP of 230/120, HR 100 – appears edematous, mild dyspnea with creps – and her foley catheter is only draining a small volume of dark looking urine.
There is no lab work available...By report she has had 4 doses of hydralazine over the past few hours with only a transient response. She has been given an IM dose of magnesium.

Would you do a neuraxial anesthetic?
What is their/your standard of care? Does or should it deviate?

Case #4 - The monster
- Arrive my morning OR - 23 y.o. waiting for CS - BP is 210/110, HR 125, O2 sat 96%
- Pt is somnolent not responding to command.
- The decision is made to place a spinal. Hyperbaric bupivacaine 10 mg is administered.
- Pt is turned supine and prep begun.
- What are the options for BP control?

The fetus is delivered 4 minutes later. Comes out flat. Midwives start to resuscitate.
- Oxytocin 5 unit given IV. Midwives ask for your help. You go to the baby station to do an assessment.
- Suddenly the surgeon yells out that she is moving.
- She is seizing again.
- What Next?
Case #4 - The monster

- Sodium Pentothal is given – 50 mg. The seizure stops.
- So does her breathing – O2 sats are falling. She needs airway support.
- How would you proceed?

Case #4 - The monster

- You successfully intubate her.
- Surgery proceeds uneventfully.
- What is your post op plan?
- How would you assess this patient’s CNS status?
- Would you extubate her?

Case #5 - Help is on the way

- Rural hospital, 1 surgeon, no anesthesia, 50 deliveries per year.
- 28 year old, G6P4 - “spontaneous” vaginal delivery.
- 90 minutes later - no placenta.
Case #5 - Help is on the way

- Manual extraction - ??
  Success
- Continued bleeding - what next?
- X-Match, uterotonics, TXA, Tamponade
- Dispatch - crisis team

Case #5 - Help is on the way

- 7 hours after delivery of the placenta help arrives
- Anesthesia - D/O, Blood products, ketamine, ETT
- Surgeon - experience
- Anesthesia nurse