



“Expect the unexpected” or “Situational irony”: Seizure and cardiac arrest during emergency caesarean section

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TIMELINE

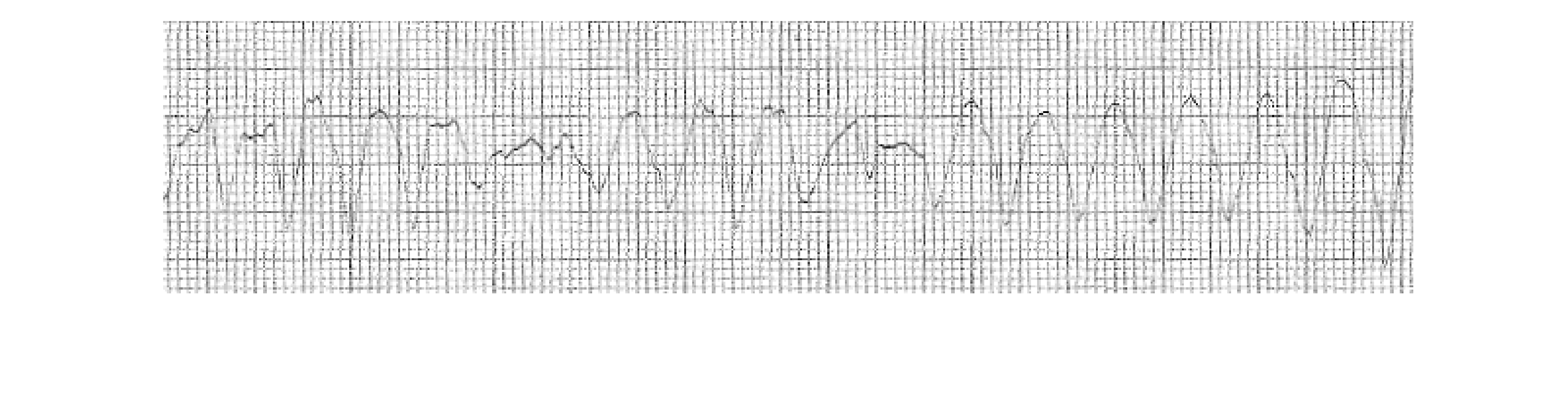
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- 09:00** Epidural labour analgesia
- 15:16** - Category 1 'Trial'
- Pathological CTG
- 15:32** Spinal: 1.9ml 0.5% heavy bupivacaine and 300mcg diamorphine
- 15:40** Attempts at vaginal delivery unsuccessful
- 15:48** - Caesarean
- Sublingual GTN for tocolysis
- 15:52** Baby delivered
- ↕
Fronto-occipital headache with increasing severity, and vomiting
- 16:14** - Vision change, tonic-clonic seizure and desaturation
- Decision to intubate: 350mg thiopentone and 150mg suxamethonium
- SpO2 recovered
- 16:17** - VF cardiac arrest: CPR and 3 shocks
- Adrenaline, amiodarone, magnesium sulphate
- 16:26** ROSC
- Next day** - Extubated on critical care
- Without neurological deficit

PATIENT DEMOGRAPHICS

- 32-year-old lady
- Body mass index (BMI) 36
- No pre-existing co-morbidities
- Primiparous
- Gestational diabetes mellitus (GDM)
- Otherwise, an uncomplicated pregnancy
- Normal blood pressure, urine and bloods at 28 weeks
- Induction of labour for GDM at 39 weeks gestation

AETIOLOGY OF EVENTS

- Seizure:
 - Urinary PCR 314 mg/mmol on intensive care
 - First presentation of pre-eclampsia, as eclampsia
- VT/VF cardiac arrest (as per MDT meeting after event) - due to a combination of:
 - 1) Hypoxia secondary to eclamptic seizure
 - 2) Physiological changes of pregnancy
 - 3) Pathophysiological cardiovascular associations with pre-eclampsia
 - 4) Cardiovascular changes with the medications for induction of anaesthesia



Thank you to the patient for allowing us to share her case

OTHER TIMELINE INFORMATION

- Spinal block check:
 - Cold T3 bilaterally and not ascending
 - Motor block - Complete (unable to move feet or knees)
- Other medications given:
 - 1g paracetamol, 8mg ondansetron and 50mg cyclizine
 - Oxytocin 5 unit bolus and 40 units infusion
- No PPH
- Normal CT head and CT pulmonary angiogram after caesarean

REFLECTIONS AND LEARNING

- Luck, relief
 - Train hard and play well
 - What a team: excellent non-technical skills by those involved
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- This highlighted the need for three key factors in acute obstetric patient management:
 - 1) Human factor skills training would be beneficial to all MDT members
 - 2) MDT training should be viewed as a period for global team development, as much as it is about clinical learning
 - 3) The significance of kindness and psychological safety in the workplace, something that were present in abundance on this day, should lead our professional interactions
 - These factors not only contribute to improving the workplace environment but can most certainly improve patient outcome
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- “And in choosing a nice doing,
You might just change one mind,
And that, in turn, might shape a world...
Where everyone is kind.”*

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You might just change one mind,
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Where everyone is kind.”*