

# Unexplained asystolic pauses in pregnancy

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# Asystolic pauses in pregnancy

- Rare
- Can be associated with spinal anaesthesia, haemorrhage or aortocaval compression
- Often neurocardiogenic aetiology

# Our case

- First pregnancy
- 35 years old
- Known cryptogenic epilepsy
- Well controlled on levetiracetam
- Increasing seizures from 22 weeks gestation, carbamazepine added in

# Admission

- 30 weeks gestation
- Admitted with abdominal pain and vaginal bleeding
- On levetiracetam and carbamazepine

# Cardiac arrest?

- Vomited
- Collapsed
- Cyanotic
- No pulse detected
- CPR commenced
- No defibrillation



# Investigations

- 12 lead ECG normal
- Echocardiography normal
- Electrolyte, troponin, glucose and anti-epileptic drug levels normal

# Further episode

Captured on telemetry:

10 second pauses associated with circulatory standstill, followed by several broad complexes before restoration of normal sinus rhythm.

# Differential diagnosis

Unclear!

- Neurocardiogenic syncope
- sinus node dysfunction
- Profound vagal reaction
- Profound hypotension following vomiting or seizure
- Anti-epileptic medication related



# Management

- Temporary pacing
- Should we deliver?

# Outcome

- Temporary intravenous pacing wires inserted in obstetric theatre
- Caesarean section, male infant, 1.58kg
- Developed aspiration pneumonitis
- Pacing wires taken out on day 3 - never fired

# Follow up

- ECG – non-specific T wave flattening; otherwise NAD
- 24 hour tape – occasional supraventricular and ventricular ectopics
- In retrospect, worsening seizures may have been similar attacks
- No attacks since delivery
- She has no recollection of events

# Future pregnancies

- Uncertain what to advise

# Questions?

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