

# Case Study: a Rare Complication of Central Neuraxial Block

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# Content

- Timeline
- Issues arising
- Background
- Discussion/Questions

# Thursday 14/10/10

- 77yo male, PVD
- Elective aorto-bifemoral bypass
- Epidural
  - Consultant
  - T11/12
  - First pass
- Admitted HDU post-operatively for overnight fluid management and monitoring

# Saturday 16/10/10 – 0030hrs

Pt transferred to L&T:

- Obs stable
- Peripherally warm; pulses present
- Epidural running 3ml/h
- Abdominal pain 5/10
- 'Motor block to left leg, improving as reported by patient'
- Encouraged to lie on R side

# 0100hrs

The initial call:

- 2/7 post aorto-bifemoral bypass
- Patient 'unable to move legs' when in HDU
  - Epidural rate decreased but motor blockade persisting
- In pain

# Assessment

- Pt looked well. Cardiovascularly stable. GCS 15, alert and oriented
- Able to flex L ankle. Unable to move limb proximally. R leg unaffected
- Warm peripherally, pulses present
- Epidural running 3ml/h. Pain 7/10
- Pt requesting epidural be stopped

# Initial plan

- Epidural stopped (tinzaparin given 2230)
  - Able to flex L knee
- Morphine PCA set up
  - Pain controlled
- Plan: maintain regular epidural observations and alert if motor blockade stops resolving

# 0630 hrs

Second call:

- Pt now unable to flex at ankle
- Neurological exam:

	R	L
Tone	N	Decreased
Power	5/5	1/5
Reflexes	-	-
Sensation	N	N



# 0630 hrs (cont)

- d/w Neurosurgeon, HWP
  - Advised needs MRI spine
- d/w Radiology SpR on call Saturday 0700 hrs
  - Currently no OOH service due to building works
  - Limited capacity from 0900 hrs
- Alerted 3<sup>rd</sup> on
- Plan: h/o to day team, MRI 0900

# 0830 hrs

Pt seen by 3<sup>rd</sup> on Anaesthetist

- d/w: Radiology SpR and on-call radiographer
  - Established no MRI service available
  - Site manager unaware that this was the case

# 0925 hrs

- Accepted for MRI at HWP by consultant Neuroradiologist
- Accepted by neurosurgical SpR
- Blue light transfer to HWP

# Subsequently...

- MRI revealed epidural haematoma
- Underwent T9-11 laminectomy and evacuation of small haematoma 1500 hrs
- Transferred back to RSCH 25/10/10
- Full recovery

# Points to consider

- Unremarkable epidural, problem-free >24h
- Equivocal symptoms/neurology
- Epidural assessment and documentation
- Unexpected unavailability of MRI
- Time to theatre from symptom onset >8h
- PHx Spinal decompression 2005/6

# Points to consider

- Happy ending!

# Background

- NAP3: Major complications of central neuraxial block<sup>1</sup>
  - 707455 cases included
- 52 major complications
  - Permanent injury: pessimistically 30, optimistically 14
  - Vertebral canal haematoma: pessimistically 5, optimistically 4
- Conclusion: data reassuring, low complication rate

1. 3rd national Audit project of the Royal College of Anaesthetists (NAP 3): major complications of central neuraxial block (Cook, 2009)

# Questions



# Epidural observations

Time	MDS	Pain	Rate
1200	0	0	5
1800	0	0	?3/5
2200	R0 L1	4	3
0000	R0 L2	4	4
0030	R0 L2	7	3
0130	R0 L1	-	-
0230	R0 L1	-	-
0630	R0 L3	-	-