

Idiopathic Transverse Myelitis
An anaesthetic conundrum on labour ward

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Introduction

- Idiopathic Transverse Myelitis (ITM) is a rare inflammatory disorder secondary to an unknown precipitant.
- It can cause motor, sensory and autonomic dysfunction.[1]
- We present the first case of a parturient with known ITM to undergo spinal anaesthesia.



Fig1: Cervical X-ray. This was the only imaging available on our system. An MRI scan would have been useful to ascertain the termination level of the conus medullaris.

Case report

- A 28 year old G1P0 required forceps delivery due to a prolonged second stage of labour.
- Her past medical history included ITM, rheumatoid arthritis & asthma.
- ITM was diagnosed aged 23 after developing bilateral weakness which lasted around 10 months. Her most recent flare up was only last year.
- During labour she was in remission and her analgesia was being managed with entonox. The obstetric team felt delivery under a pudendal block was not feasible and needed anaesthetic input.
- The patient declined a general anaesthetic due to bad personal experience with this technique and opted for a subarachnoid block. Her pre-operative bloods can be seen below.

Hb		121	g/L
WBC	*	11.2	x10 9/l
Platelets		177	x10 9/l
MCV	*	99	fl
RBC	*	3.79	x10 12/l
PCV		0.376	/L
MCH		31.9	pg
Neutrophils	*	8.6	x10 9/l
Lymp		1.7	x10 9/l
Monocytes	*	0.9	x10 9/l
Eosinophils		0.0	x10 9/l

- A spinal anaesthetic (25G needle) was performed at L3/4 on first attempt under strict aseptic conditions. The level was pre-marked with a blunt end of needle under ultrasound guidance.
- The patient reported no paraesthesia and an injection of 12.5mg heavy marcaine & 400mcg diamorphine produced a cold sensory block above T4. The operation was uneventful
- The patient reported no neurological issues secondary to the spinal anaesthetic and no evidence of a transverse myelitis flare up after an 8 week follow up.

Discussion

- Spinal and epidural anaesthesia have been associated with causing transverse myelitis[2] and thus performing this procedure in an already compromised central nervous system could theoretically precipitate another attack.
- As the patient declined a general anaesthetic this created a conundrum as to the safest way to proceed.
- Due to patient choice and no reasonable alternative we needed to make the spinal anaesthetic as safe as possible.
- Anaesthetists are often inaccurate in identifying the correct intervertebral level on palpation and spinal cord injuries have occurred when advancing the needle above L3.[3]
- The use of ultrasound in this case ensured placement was safely below the conus medullaris.
- This case report highlights the safe administration of a spinal anaesthetic in a patient with ITM when meticulous attention is paid to sterility and safe needle placement.

References

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epidural anaesthesia in a paediatric patient. Anaesthesia. 2005; 60:921-923.
3. Reynolds F. Damage to the conus medullaris following spinal anaesthesia. Anaesthesia 2001; 56:238-47