

A Case Report of Horner's Syndrome and Upper Limb Weakness during Epidural Anaesthesia in Labour

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Introduction

We present a rare case of Horner's syndrome and upper limb weakness following epidural anaesthesia.

Horner's Syndrome was noted as a complication of epidural anaesthesia as early as 1972, with an estimated incidence of 0.4% - 2.5% in labouring patients. It is classically described as unilateral ptosis, miosis, anhidrosis, and conjunctival injection. Cases typically resolve in minutes up to 24 hours. Several mechanisms have been proposed for Horner's syndrome in the labour setting, but the exact mechanism has not been clarified. Most likely it is due to high sympathetic blockade of local anaesthetics spreading in cephalad direction. Few other case reports have described upper limb weakness complicating Horner's Syndrome when it presents secondary to epidural anaesthesia.

Case - Background

A 26yo G4P0, Rh+, GBS unknown

G1+2: miscarriage managed with D+C
G3: partial molar pregnancy, BHCG tracking complete
PMHx: Endometriosis, Depression, Fibromyalgia, Asthma
PSHx: 2x laparoscopies for Endometriosis

Pregnancy investigations were unremarkable
Hb 142, serology negative, rubella immune, iron replete
Low risk cFTS
Morph NAD; no further growth scans required
28-week bloods unremarkable, normal OGTT

Pregnancy otherwise uncomplicated

Case - Delivery

PPROM @ 40+2

- Antibiotics commenced at 18 hours
- Oxytocin commenced and up titrated

EDB placed at 2cm dilatation

- 18g epidural needle inserted at L4/5
- Test dose 3ml 2% Lignocaine followed by Ropivacaine 0.2% 5ml + 5ml
- PCEA set up - Marcaine 10ml/Fentanyl 5ml

26 minutes later noted fetal bradycardia (FHR 70-100bpm)

- Maternal BP normal throughout 136/60
- Management: position change, IVT, O2 via Hudson Mask, oxytocin ceased

CTG recovered with interventions

Oxytocin restarted 2 hours post bradycardia
Block noted to be high 3 hours post EDB insertion

- R side T3; L side T5
 - Patient sat up and advised not to use PCA
- Block continued to rise to C6 → MET call
- Patient alert and well, all observation normal apart from temp 38.5

MET Call arrived

- 2nd IV access, fluid bolus
- L pupil dilated size 8; R pupil size 6, ptosis noted on right
- Nil motor control of right hand and arm
- Flushed face, temperature 38+
- Full septic screen sent
- Treated with IV Gentamicin and Metronidazole

Case - Delivery Continued

Overall concentration administered over duration of EBD was 35ml of PCEA cocktail in addition to initial test doses of 13ml

Discussed with anaesthetics

- Max 5-15ml / hr through PCEA ongoing
- To re-commence using PCEA only once block level reduced

The symptoms of Horner's Syndrome resolved within 6 hours of onset

Good progress to fully dilated
NVD of live male with APGARs 9:9, 3060g
250ml EBL with second degree tear repaired
uncomplicated post-natal course

Discussion

The increasing use of epidural anaesthesia during labour has led to a higher incidence of reported cases of Horner's Syndrome. These cases are typically transient and resolve spontaneously upon discontinuation of patient-controlled epidural analgesia (PCEA), as observed in our case. Rarely, Horner's Syndrome in this context may be associated with hypotension, blurred vision, neck pain, or cranial nerve palsies. One case report in the literature describes complete sensory and motor blockade of the brachial plexus, which can mimic a cerebrovascular accident and should be considered in differential diagnoses. It is likely that Horner's Syndrome during labour is underreported due to its often-subtle clinical manifestations.



Picture presented with full patient consent - showing classic features of Horner's Syndrome

Conclusion

The incidence of Horner's Syndrome is likely underreported. Therefore, careful clinical evaluation is essential for identifying complications associated with a high block. Patients should receive close follow-up to monitor symptom resolution, as the timeframe for recovery may differ among individuals.

References

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