

An Anaesthetic to Mother, yet a Thunderclap to Baby: A Rare Case of Neonatal Toxicity Associated with Perineal Infiltration of Lignocaine



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Introduction

- Lignocaine is commonly used in obstetric practice as a local anaesthetic agent for perineum.
- Although rare, neonatal complications due to its direct infiltration or transplacental intoxication have been reported in literature.

Objectives

- To describe the presentation and diagnostic dilemma of neonatal lignocaine toxicity following infiltration for episiotomy.

Case

- A 31-year-old primigravid mother with unremarkable antenatal history, had a term vaginal birth.
- A right mediolateral episiotomy was performed after infiltrating 15ml of 2% lignocaine.
- The newborn female baby weighed 3155g and her 1- and 5-minute APGAR scores were 9.
- The baby suddenly became unwell at 16 minutes of life and was apnoeic, pale and floppy despite normal heart rate. O₂ saturation was 80% after IPPV and showed tonic seizure-like activity.
- She was then intubated and admitted to NICU for further management.

Results

- Initial management was performed in view of neonatal seizure to exclude cranial pathology and infection.
- The baby had Anti-epileptics and antibiotics only for 48 hours.
- Brain imaging, infective and metabolic screens were normal.
- Baby recovered well and extubated after 24 hours.
- Lignocaine level was normal, but it was checked only 13 hours later due to a miscommunication on infiltration.
- She was discharged on day 05 and had an unremarkable follow-up review.

Discussion & Conclusion

- Lignocaine level is crucial in assessing newborns abruptly deteriorated soon after birth, when risk factors for hypoxic ischemic encephalopathy are absent, to exclude its toxicity.
- Precise communication between obstetric and neonatology teams is pivotal to identify lignocaine toxicity in advance.
- Inadvertent lignocaine infiltration to baby's scalp should be carefully avoided specially when a large caput is present, and when perineum is oedematous.

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Disclosure

Authors have no conflict of interest to declare

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