



HIE Deep Dive Case Review

Disseminating Learning to improve outcomes



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Objective:

To review suspected HIE cases (2023–2024), identify key themes, and share learning with the MDT

Design & Methods:

A retrospective review was conducted at Newham University Hospital (5,273 annual births). All HIE-coded cases on Badgernet from January 1 to December 31, 2023, were analysed using data from Cerner (obstetric), Badgernet (neonatal), HSIB, and internal reports. The aim was to identify themes and recommend improvements in perinatal care.

Results:

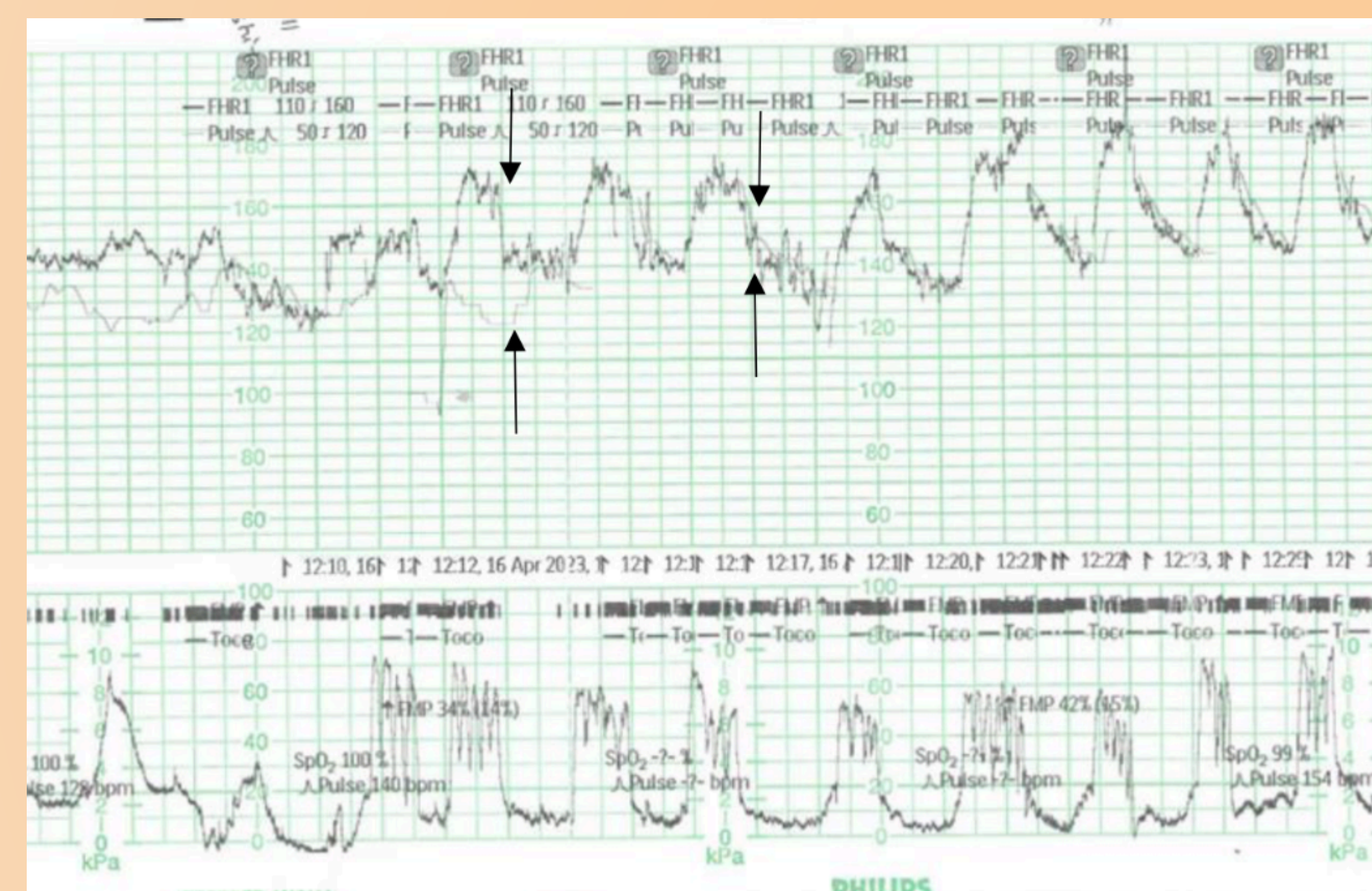
Eight cases were initially coded as HIE in 2023. All met TOBY criteria and were transferred for therapeutic cooling. MRI confirmed HIE in five cases, giving an incidence of 0.95 per 1,000 births—below the UK average of 1.5–2.5 per 1,000.

Discussion:

This review identified a relatively low HIE rate in a busy, high-risk District General Hospital compared to the national average.

Key themes and recommendations have been shared through multiple platforms, including a cross-site HIE study day, local audit meetings, weekly CTG forums and ‘skills & drills’ teaching to improve outcomes.

Escalation pathways have also been developed where issues were identified, and the above key themes have been displayed as posters around the unit and incorporated into local Fetal Monitoring training.



Intrapartum CTG:

Recording of maternal pulse during active second stage and prolonged decelerations in triage.

Intrapartum Factors:

- Meconium-stained liquor
- Sepsis in labour
- Obstructed labour with AKI
- Failed instrumental delivery
- Impacted fetal head.

Human Factors:

Communication challenges during emergencies (e.g. impacted fetal head in theatre) and fixation on CTG monitoring issues.

KEY THEMES

Antenatal CTG:

Delays in recognising and escalating an abnormal antenatal CTG showing a sinusoidal trace with an STV of 2.6.

Triage Delays: Incorrect application of BSOTS triage criteria and delay in transferring pathological CTGs from triage to labour ward/ theatre.

