

paediatric watch

Lessons from the frontline

Edition 5-19

Non-accidental injuries

Background

A three week old baby was brought into the Emergency Department (ED) with a number of blanching bruise-like marks to his lower limbs. Although these marks were considered to be atypical for meningococcal disease it could not be excluded. A differential diagnoses of non-accidental injury was considered by the junior doctor, however, this was not discussed with the ED senior doctor or the paediatric team.

The baby was treated for potential meningococcal disease. A cephalohaematoma was noted on examination, however, this was not considered abnormal at the time due to the baby's age despite being delivered by lower segment caesarean section. A Child Safety Welfare and Wellbeing form was completed and the infant was not identified at risk. The infant was discharged home.

Approximately 12 days later, the baby re-presented with vomiting and unsettled behaviour and seizure activity. The baby was transferred to a paediatric intensive care unit where imaging identified numerous intracranial haemorrhages, multiple rib fractures of varying ages, and metaphyseal corner fractures of the baby's leg.

Lessons learnt

In NSW between 2017 and 2018, there were six separate RCA's involving Non-Accidental Injury (NAI) of children. Four children died as a result of these cases and an additional three children suffered significant morbidity. In all six cases,

child protection was identified as a risk factor.

Sentinel injuries are defined as those types of injuries inflicted to young children prior to a serious head trauma. These may include facial bruising and frenulum injury. Bruises are the most common sentinel injury. Even minor bruising in young infants is a red flag and requires escalation and investigation. Any bruising in non-ambulating infants (under 6 months) is unusual and should be a red flag.

Other red flags for NAI may include:

- subconjunctival haemorrhage (after the neonatal period)
- unexplained head injury (particularly in children under 2 years)
- multiple unexplained injuries
- unexplained delay in seeking medical care
- fractures in pre-mobile infants
- unexplained long bone fractures in children under 3 years
- radiological evidence of old or healing fractures

It is important to exclude an intracranial haemorrhage in infants with unexplained vomiting, seizures or head injuries. When a clinician suspects a child has an intracranial injury that may be due to abuse, they must consult with a tertiary paediatric child protection team and the child must be transferred for medical management and forensic assessment of the head injury.

When an injury has occurred without a clear cause, a differential of NAI must be included and investigated. If a concern has been raised about NAI, it must be documented in the patients' medical record, further

investigated and ruled out prior to discharge. It is crucial that junior doctors discuss their concerns with a senior doctor when there is any suspicion of a NAI. All clinicians have a responsibility to report when there is risk of serious harm. The [Mandatory Reporting Guide \(MRG\)](#) assists clinicians on when and how to make a report.

An appropriate medical assessment must be conducted prior to lodging a report. The MRG supports mandatory reporters in NSW to determine whether a report to the Child Protection Helpline is needed for concerns about possible abuse or neglect of a child or young person, and to identify alternative supports for vulnerable children, young people and their families.

Additionally, the Child Abuse & Sexual Assault Clinical Advice Line (CASACAL) is a 24/7 telephone advice line for clinicians. CASACAL provides advice about the clinical assessment of children and young people, who are suspected victims of child sexual assault, physical abuse or neglect. This service should be utilised once local advice and escalation pathways have been followed.



For more paediatric resources visit:

<http://www.cec.health.nsw.gov.au/patient-safety-programs/paediatric-patient-safety/paediatric-quality->

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