





**APPROVED: December 2021** 

Title:	Bruising in Pre-Mobile Infants
Version:	1.1
Review Date:	1 <sup>st</sup> December 2023
Target Audience:	All medical and nursing staff in the Emergency Department, all paediatric wards and Community Child Health.  All primary care and community based staff working with young infants and babies.
Keywords:	
Shared MCN Guidance:	This guidance has been produced with the support of the three managed clinical networks for child protection in Scotland. The guidance represents the key considerations that health boards could reasonably be expected to provide support for. Each guidance document is primarily to support clinical care and is designed to be modified by individual boards or centres with local contact information, investigation sets and/ or clinical systems information.

## **Purpose**

This guidance is designed to support all frontline staff in both community and hospital settings to assess, describe and plan the management of a child who presents with bruising or other injuries and who is not yet independently mobile. In doing so, this guidance will support child protection decision making and safety planning by multi-agency staff.

This guidance is to provide clinical staff to support the clinical assessment of pre-mobile babies presenting with bruising.

### Scope

The guidance covers actions from the recognition of a bruise by a professional based in primary care or the community, to hospital staff response, paediatric care and recommendations for interagency referral discussion and multi-agency child protection planning where there is this concern.

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Professionals should understand the following:

- Understand bruises in pre-mobile babies can be a warning sign of future abusive head trauma
   which can cause brain injury and/or death in the majority of cases.
- Know that injuries in pre-mobile infants, however plausible, must routinely lead to multi-agency information sharing.
- Know how to refer such a baby for a medical opinion from the community.
- Know whom to contact for child protection purposes.

### **Definitions**

Pre-mobile babies	Infants not crawling, cruising (walking holding onto the furniture) or walking.
Bruise	A collection of blood, visible to the naked eye as an area of discolouration, which has leaked into the surrounding tissues after vascular disruption, principally as a result of trauma or occasionally spontaneously, as a result of a disease process. Typically, bruises are caused by blunt force trauma, although they may be associated with any type of impact and can accompany many different types of wounds.
Physical abuse	The National Guidance for Child Protection Scotland (2014) defines physical abuse as the 'causing of physical harm to a child or young person. Physical abuse may involve hitting, shaking, throwing, poisoning, burning or scalding, drowning or suffocating. Physical harm may also be caused when a parent or carer feigns the symptoms of, or deliberately causes, ill health to a child they are looking after.'
Petechiae	A petechia (pl. petechiae) is a small (<3 mm) red or purple spot on the skin or conjunctiva, caused by a bleed from broken capillary blood vessels. Petchiae cannot be pushed away using a glass spatula or a finger. Even under pressure, the reddening of the skin remains visible.

## **Clinical Evidence**

The most up to date clinical evidence can be found here: Child Protection Evidence - Bruising | RCPCH

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The following evidence statements have been taken from 'Child Protection Evidence Systematic review on Bruising (RCPCH, March 2020)

- It is not possible to age a bruise based on a naked eye assessment.
- Bruising was the most common injury in children who have been abused
- In pre-mobile infants, accidental bruising is rare (<1%)</li>

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## Bruising features that are suggestive of physical child abuse:

- Bruising in children who are not independently mobile
- Bruises that are seen away from bony prominences
- Bruises to the face, abdomen, arms, buttocks, ears, neck, and hands
- Multiple bruises in clusters
- Multiple bruises of uniform shape
- Bruises that carry the imprint of implement used or a ligature
- Bruises that are accompanied by petechiae, in the absence of underlying bleeding disorders.

### **Clinical Assessment**

Pre-mobile babies with a bruise must always be assessed by a senior doctor/clinician at the earliest opportunity<sup>1</sup>.

See appendix 1 for key features in history and assessment.

### **Developmental Milestones**

- 1-4 weeks: Loves looking at faces, can fix and follow.
- 6 weeks: develops a social smile.
- 4-12 weeks: lifts head while lying prone, starts to roll.
- 3-5 months: reaches out for objects.
- 5 months: mouths all objects.
- 6 months: passes objects from one hand to another.
- 6-8 months: starts to sit without support.
- 6-9 months: starts trying to crawl.
- 9-11 months: learns to drop items.
- 10-18 months: learns to walk, very unsteady at first.

<sup>&</sup>lt;sup>1</sup> If there is any difference of opinion between clinical staff regarding the cause of possible abusive injuries, the opinion of a third clinician must be sought and/or the safest option should be considered.

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## Prehospital actions and responsibilities

When a pre-mobile baby presents with an inadequate or no explanation for a cause of bruising, the following pathway should be followed:

INITIAL CONCERN

- •Initial concern of bruising in pre-mobile baby noted (Health visitor or family nurse/GP/Nursery staff/Social worker/other professionals)
- CHECK FOR ANY IMMEDIATE HEALTH NEEDS

SUPPORT FAMILY

- •Professional explains the concern for baby and the need for further assessment by a doctor, using Bruising in Young Babies leaflet to help with explanation
- •Ensure support is provided for family (or ambulance is called) to attend Emergency Department

MULTI-AGENCY DISCUSSION

- Follow local child protection referral procedures to raise a child protection Interagency Referral Discussion (IRD).
- •Follow up verbal concerns with documentation as per local guidance

#### Immediate health needs

Remember to check for any immediate health needs in a pre-mobile baby with bruising. Infants can present to hospital with a variety of symptoms. These range from poor feeding, lethargy, fits and respiratory difficulty to sudden death. In some cases, there may be no history.

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## Hospital pathway

This section outlines the clinical care required for these children. Please note, some of this care may happen simultaneously, but is presented here in a step wise pathway.

**Emergency Department** 

Assess baby for any immediate health needs (for example risk of sepsis)

Gather presenting history and document bruising on a body chart and any other medical or child protection concerns.

Explain the plan to consider medical causes but also that you are raising a child protection concern as "everyone working with children must follow the guidance when they find a bruise or a mark which appears to be a bruise, in a baby".

Gather family/carer and other children's details (names, dates of birth, addresses of adults and children)

Arrange medical admission: discuss with the consultant paediatrician who will be admitting the child and with the child protection team (this will vary according to local services).

INFORM SOCIAL WORK OF CONCERN & ADMISSION. ENSURE DISCUSSIONS ARE DOCUMENTED IN CLINICAL NOTES.

Raise Interagency Referral Discussion (IRD), either before or after initial ED assessment, including immediate assessment of risk to siblings.

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Paediatric care

Admit child taking verbatim history from family and documenting medical assessment – consider use of the national proforma for child protection medical examinations.

Admit baby to visible space and discuss with senior nurse/ consultant regarding level of care required both to facilitate parenting and to ensure baby is safe

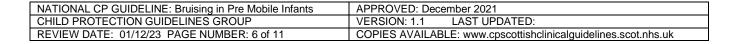
Update parents/carers, explaining the need for further investigations. See leaflets: skeletal survey and bruising information. Any discussion needs clearly documented in the baby's clinical notes.

**Ensure all investigations completed.** Please see the <u>Child</u> <u>Protection Companion</u> for full details of investigations as these can vary.

#### These include:

- Skeletal survey and head CT (2<sup>nd</sup> opinion required)
- Opthalmology review for retinal haemorrhage
- 1<sup>st</sup> line bloods: FBC and film, coagulation screen, assays of Factor VIIIc, Von Willebrand factor (VWF antigen and VWF activity), calcium, phosphate, alkaline phosphatase, Vitamin D, PTH

Daily top to toe examination on the ward round (to ensure clinical wellbeing and assess if there is an evolving process) and explanation of any normal results and plans for further tests are given to family.









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Complete a child protection medical report (also known as Joint Paediatric Forensic Examination/ JPFE/ soul and conscience report according to local protocols).

Communicate with social work and police colleagues and be clear as to the clinical opinion.

Inform family of child protection results, with support/agreement of other agencies/specialists.

Arrange a discharge planning meeting. Discharge planning with other agencies should include interim safety planning to ensure that the baby and any siblings remain safe.

Ensure follow up skeletal survey is requested and communicated to other agencies to facilitate attendance.

If any bruises are not fading/resolved by discharge, discuss the arrangements for review at discharge planning meeting.

For copies of the Bruising in Young Babies information leaflet for parents and carers, please go to:

www.ermcncp.scot.nhs.uk

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Appendix 1:	Clinical assessi	ment of a pre-	mobile baby	with po	ssible bruise
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PATIENT DETAILS:	
HISTORY OF INJURY	
Document the explanation using the parent's of	own words.
Is there a delay in presentation?	
Does the bruise or injury fit with the explanation	on given?
Does the bruise or injury fit with the child's sta	
OTHER ILLNESS/CONCERNS (is development	BIRTH HISTORY
on track?)	

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FAMILY HISTORY (specifically any bleeding disorders)	IMMUNISATIONS & DEVELOPMENT
SOCIAL INFORMATION (on child protection register/ looked after/ has a social worker or extra support)	ALLERGIES Yes No DRUG TREATMENT

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TOP TO TOE EXAMINATION FINDINGS				
WEIGHTKG,	CENTILE			
HEAD CIRCUMFERENCE	CM,		CENTILE	
FONTANELLE:			TENSE/ BULGING	
PUPILS REACTING TO LIGHT	LEFT (YES / N	O) RIGH	IT (YES/ NO)	
All documented injuries should be meas	ured			
All documented injuries should be measured  R  R  R  R				

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EXAMINATION NOTES
IMPRESSION
INVESTIGATIONS – consider the following:
Clinical photography
Blood tests including FBC, coagulation screen, bone profile, assays of Factor VIIIc, Von
Willebrand factor (VWF antigen and VWF activity)
Imaging: Head CT, skeletal survey
Ophthalmology

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