Assessment of Bruising in Children in Primary Care

Southwark

NHS South East London Clinical Commissioning Group

Key Principles

A bruise must **never be interpreted in isolation** and must always be assessed in the context of medical and social history, developmental stage, explanation given, full clinical examination and relevant investigations [1]

Children less than two years of age are at an increased risk of severe physical abuse [2]

Pre-mobile bruising is also a widely reported 'sentinel' injury in babies and younger and its recognition is vital in prevention of more severe abuse [1]

Presentations in older children can also represent 'sentinel' injuries.

Abusive bruises are often located away from bony prominences and are found predominantly over soft tissue areas. Sites include ears, neck, cheeks, buttocks, back, chest, abdomen, arms, hands and posterior thigh. However, **no site is pathognomonic** and a careful history must be taken in all cases [2]

Listen and observe, seek explanation, record explanations by parents and carers [3]

You cannot age a bruise

Seek second option/ discuss with colleague

Characteristics and features of bruising that may suggest 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, this includes single or multiple linear bruising due to being struck with a rod-like instrument, banding where the hand has been tied or an imprint of the implement such as an electrical cord or studded belt

Bruises that are accompanied by petechiae, in the absence of underlying bleeding disorders [1]

A significant injury where there is no explanation

An explanation that does not fit with the pattern of injury seen

An explanation that does not fit with the motor-developmental stage of the child

Injuries in infants who are not independently mobile.

An explanation that varies when described by the same or different parents/carers

Multiple explanations that are proposed but do not explain the injury seen

An inappropriate time delay in seeking appropriate medical assessment or treatment

Inappropriate parent or carer response (e.g. unconcerned or aggressive)

A history of inappropriate child response (e.g. didn't cry, felt no pain)

Presence of multiple injuries

Child or family known to children's social care or subject to Child Protection Plan

Previous history of unusual injury/illness (e.g. unexplained apnoea)

Repeated attendance with injuries that may be due to neglect or abuse [2]

Assessment of Bruising in Children in Primary Care

Southwark

NHS South East London Clinical Commissioning Group

Observe bruise/suspect physical abuse

↓

Listen and observe
History given, any disclosure, child's appearance and demeanour, interaction with parent/carer, physical signs

Seek explanation
For any injury from both parent/carer and child in open and non-judgemental manner

Record
Observations and verbatim explanations from whom and when in child's clinical record.
Record cause for concern[3]
Consider diagrammatical record including distance from fixed point, shape, dimensions and colour

↓

Consider, suspect or exclude maltreatment [3]
Review alerting features in child's history, past risk, presentation, interaction with parent/carer

↓

Explain need to refer [4,5]

↓

Discuss with colleague/safeguarding lead

↙ ↘

Seriously ill/injured/ at risk child

↓ ↓

Refer directly to hospital

+

Discuss case with MASH **020 7525 1921** and complete MASH referral [4,5]

Consider need to discuss/ seek advice from medical element of case with on call Child Protection Paediatric Team Sunshine House **0203 049 8010**

↔

Discuss case with MASH **020 7525 1921** and complete MASH referral [4,5]

↘ ↙

Record all details contemporaneously, actively contribute to multi-agency assessments

References:

1. Bruising: systemic review (2019) *RCPCH Child Protection Portal*. Available at:https://childprotection.rcpch.ac.uk/child-protection-evidence/bruising-systematic-review/
2. Chapter 9: Recognition of Physical Abuse, (updated 2019) *Child Protection Companion. Available at:* https://childprotection.rcpch.ac.uk/child-protection-companion/
3. National Institute for Health and Care Excellence (NICE) (2009) Child maltreatment: when to suspect maltreatment in under 18s. CG89. Available at: https://www.nice.org.uk/guidance/cg89
4. Threshold Document: Continuum of Help and Support (2021) *London Child Protection Procedures*. Available https://www.londoncp.co.uk/files/revised_guidance_thresholds.pdf
5. Multi-agency Threshold Guide (2019) *Southwark Safeguarding Children Partnership.* Available https://safeguarding.southwark.gov.uk/policies-procedures-guidance/policies-children/
6. Chapter 3. Not making a referral after bruising to non-mobile babies, (2016) *Learning into practice: improving the quality and use of Serious Case Reviews, Practice issues from Serious Case Reviews/* Available at: https://www.scie.org.uk/safeguarding/children/case-reviews/learning-from-case-reviews/03.asp

Not making a referral after observation of bruising in non-mobile babies- what's the issue?[6]

Social Care Institute for Excellence (SCIE) undertook analysis of Serious Case Reviews which identified incidences of observation of bruising which did not result in referrals, a number of reasons were highlighted

- Lack of understanding local procedures
- Lack of professional curiosity, respectful scepticism on explanations
- Influence of relationship with family

Differentials and Potential Mimics [2]

Bleeding disorders that may present with bruising:	**Other conditions** that mimic or present with bruises may include:
Defects in primary haemostasis (the formation of platelet plugs at the site of injury) result in bruises, petechiae and bleeding from mucosal membranes. Disorders include: Von Willebrand disease, Idiopathic Thrombocytopenic Purpura, inherited disorders of platelet function (e.g. storage pool disorder, Glanzmann's thrombasthenia) **Defects in secondary haemostasis** (coagulation factor cascade) results in bruising and bleeding in deeper tissues such as muscle, joints and internal cavities. Disorders include: coagulation disorders (e.g. Factor VIII deficiency, Factor XIII deficiency), vitamin K deficiency, drugs (Warfarin, Heparin).	• Birth marks (Mongolian blue spots, capillary haemangioma, congenital melanocytic naevi) • Vasculitic disorders • Infection related (e.g. meningococcal septicaemia) • Drug related (e.g. aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs) • Erythema Nodosum

References:

1. Bruising: systemic review (2019) *RCPCH Child Protection Portal*. Available at:https://childprotection.rcpch.ac.uk/child-protection-evidence/bruising-systematic-review/
2. Chapter 9: Recognition of Physical Abuse, (updated 2019) *Child Protection Companion. Available at:* https://childprotection.rcpch.ac.uk/child-protection-companion/
3. National Institute for Health and Care Excellence (NICE) (2009) Child maltreatment: when to suspect maltreatment in under 18s. CG89. Available at: https://www.nice.org.uk/guidance/cg89
4. Threshold Document: Continuum of Help and Support (2021) *London Child Protection Procedures*. Available https://www.londoncp.co.uk/files/revised_guidance_thresholds.pdf
5. Multi-agency Threshold Guide (2019) *Southwark Safeguarding Children Partnership.* Available https://safeguarding.southwark.gov.uk/policies-procedures-guidance/policies-children/
6. Chapter 3. Not making a referral after bruising to non-mobile babies, (2016) *Learning into practice: improving the quality and use of Serious Case Reviews, Practice issues from Serious Case Reviews/* Available at: https://www.scie.org.uk/safeguarding/children/case-reviews/learning-from-case-reviews/03.asp