# Assessment of Bruising in Children in Primary Care

Southwark



# **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 <sup>1</sup>

Children less than two years of age are at an increased risk of severe physical abuse <sup>2</sup> **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 <sup>2</sup> Listen and observe, seek explanation, record explanations by parents and carers <sup>3</sup>

> 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 motordevelopmental 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

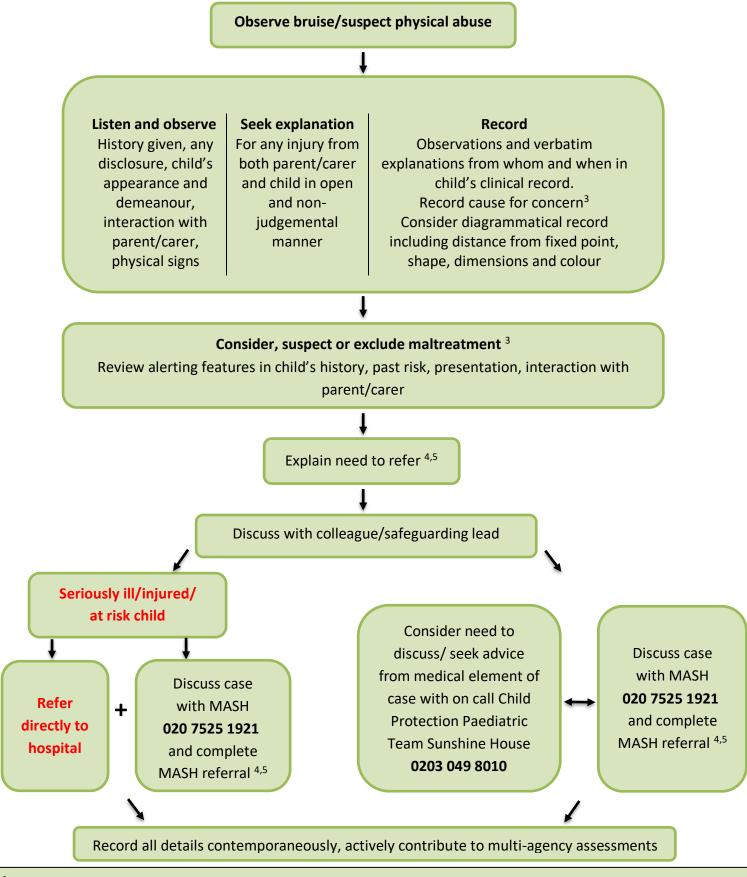
Previous history of unusual injury/illness

(e.g. unexplained apnoea)

Repeated attendance with injuries that may be due

to neglect or abuse 2





#### References:

- 1. Bruising: systemic review (2019) RCPCH Child Protection Portal. Available at: <a href="https://childprotection.rcpch.ac.uk/child-protection-evidence/bruising-systematic-review/">https://childprotection.rcpch.ac.uk/child-protection-evidence/bruising-systematic-review/</a>
- 2. Chapter 9: Recognition of Physical Abuse, (updated 2019) Child Protection Companion. Available at: <a href="https://childprotection.rcpch.ac.uk/child-protection-companion/">https://childprotection.rcpch.ac.uk/child-protection-companion/</a>
- 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 <a href="https://www.londoncp.co.uk/files/revised\_guidance\_thresholds.pdf">https://www.londoncp.co.uk/files/revised\_guidance\_thresholds.pdf</a>
- 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: <a href="https://www.scie.org.uk/safeguarding/children/case-reviews/learning-from-case-reviews/03.asp">https://www.scie.org.uk/safeguarding/children/case-reviews/learning-from-case-reviews/03.asp</a>



# Not making a referral after observation of bruising in non-mobile babies- what's the issue?<sup>6</sup>

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<sup>2</sup>

**Bleeding disorders** that may present with bruising:

**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).

**Other conditions** that mimic or present with bruises may include:

- Birth marks
   (Mongolian blue spots, capillary haemangioma, congenital melanocytic naevi)
- Vasculitic disorders
- Infection related (e.g. meningococcal septicaemia)
- Drug related

   (e.g. aspirin, nonsteroidal antiinflammatory drugs (NSAIDs)
- Erythema Nodosum

#### References:

- 1. Bruising: systemic review (2019) RCPCH Child Protection Portal. Available at: <a href="https://childprotection.rcpch.ac.uk/child-protection-evidence/bruising-systematic-review/">https://childprotection.rcpch.ac.uk/child-protection-evidence/bruising-systematic-review/</a>
- 2. Chapter 9: Recognition of Physical Abuse, (updated 2019) Child Protection Companion. Available at: <a href="https://childprotection.rcpch.ac.uk/child-protection-companion/">https://childprotection.rcpch.ac.uk/child-protection-companion/</a>
- National Institute for Health and Care Excellence (NICE) (2009) Child maltreatment: when to suspect maltreatment in under 18s. CG89. Available at: <a href="https://www.nice.org.uk/guidance/cg89">https://www.nice.org.uk/guidance/cg89</a>
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