

Assessment of Bruising in Children in Primary Care

Safeguarding Forum

3.11.2021

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 investigations¹

Children less than two years of age are at an increased risk of severe physical abuse²

Pre-mobile bruising is also a widely reported 'sentinel' injury in babies and younger and its recognition is vital in prevention of more severe abuse¹

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 cases²

Listen and observe, seek explanation, record explanations by parents and carers¹

You cannot age a bruise
Seek second opinion/ discuss with colleague

Characteristics and features of bruising that may suggest physical child abuse

Bruising in children who are not independently mobile

A significant injury where there is no explanation
An explanation that does not fit with the pattern of injury seen

Bruises that are seen away from bony prominences

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

Bruises to the face, abdomen, arms, buttocks, ears, neck, and hands

Injuries in infants who are not independently mobile.
An explanation that varies when described by the same or different parents/carers

Multiple bruises in clusters

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

Multiple bruises of uniform shape

An inappropriate time delay in seeking appropriate medical assessment and treatment
Inappropriate parent or carer response (e.g. unconcerned or aggressive)

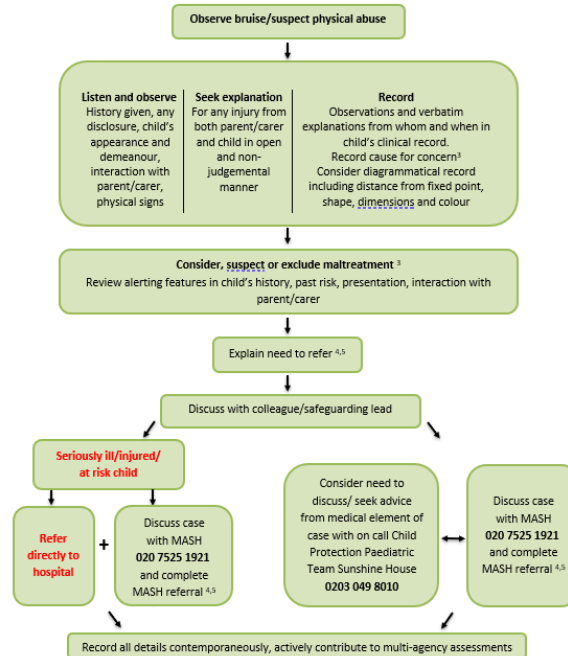
Bruises that carry the imprint of implement used or a ligature, this includes single or multiple linear bruising due to being struck with a rod-like instrument, banding where the hand has been tied or an imprint of the implement such as an electrical cord or studded belt

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)

Bruises that are accompanied by petechiae, in the absence of underlying bleeding disorders¹

Repeated attendance with injuries that may be due to neglect or abuse²

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References:

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2. Chapter 9: Recognition of Physical Abuse. (updated 2019) Child Protection Companion. Available at: <https://childprotection.org.uk/child-protection-companion/>
3. National Institute for Health and Care Excellence (NICE) (2009) Child maltreatment: when to suspect maltreatment in under 18s. CG88. Available at: <https://www.nice.org.uk/childprotection>
4. Threshold Document: Continuum of Help and Support (2021) London Child Protection Procedures. Available https://www.londoncpg.org.uk/files/revised_alertance_thresholds.pdf
5. Multi-agency Threshold Guide (2019) Southwark Safeguarding Children Partnership. Available <https://safeguarding.southwark.gov.uk/policies-procedures-guidance/policies-child/>
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.nice.org.uk/learning-into-practice/childrens-care-emergency-response-from-serious-case-reviews-03.pdf>

Assessment of Bruising in Children in Primary Care Southwark



Not making a referral after observation of bruising in non-mobile babies- what's the issue?²⁶

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 Mimics²

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).

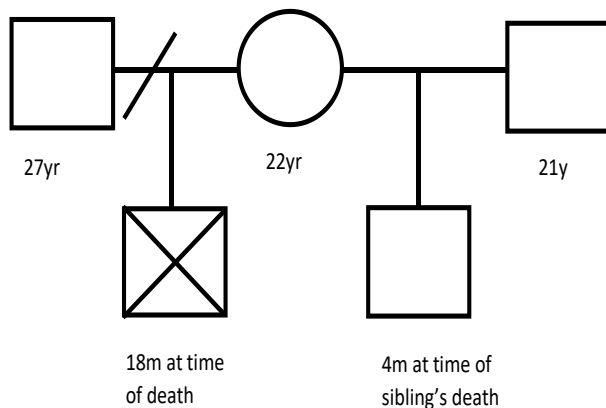
Other conditions that mimic or present with bruises may include:

- Birth marks (Mongolian blue spots, capillary haemangioma, congenital melanocytic naevi)
- **Vasculitic** disorders
- Infection related (e.g. meningococcal septicaemia)
- Drug related (e.g. aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs)
- Erythema Nodosum

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Case



Step-father called LAS, reporting Child in the other room, heard a thud and saw him 'have a seizure'

Child admitted to KCH in status epilepticus, bruising to face noted.

Urgent decompressed craniotomy and PICU admission post-operatively. Death by neurological criteria 2 days later.

Suspicion of NAI- unexplained bruise on back also, inconsistency in step-father's account

Sibling placed in care of paternal grandparents

Child brought to GP a month earlier with nappy rash and noted he 'bruised easily'. Blood tests arranged, reported as normal

NHS111 call from step-father, presenting as father reporting bleeding to base of penis, noted while bathing, advised to attend ED, no evidence brought

Family not known to Children Social Care

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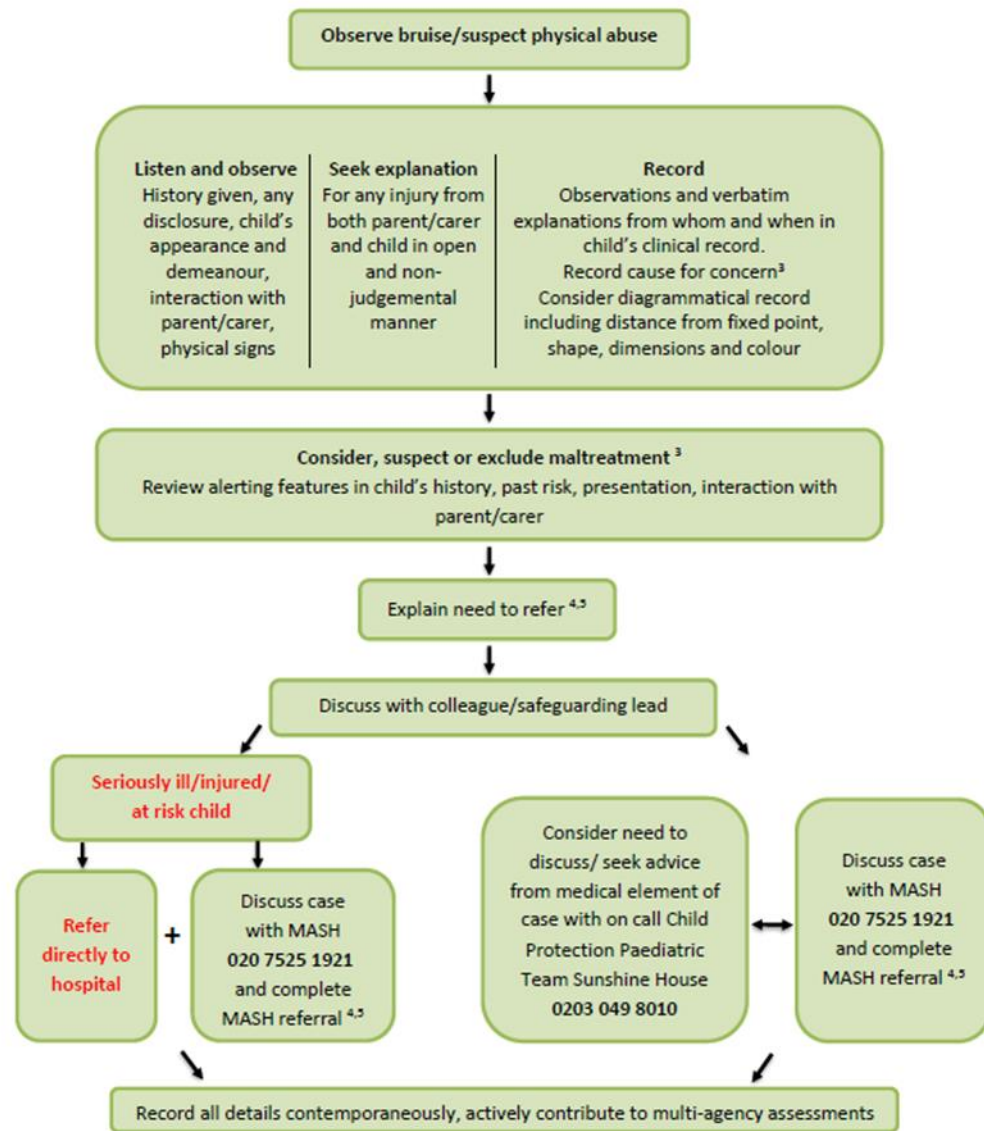
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Consider diagrammatic record

Name: DOB: NHS No: Record No:

Date of Examination:

Examiner Name:

Signature:

R L

Pages not needed should be crossed through and initialled and not removed from record
Adapted from RCPCH Child Protection Companion 2013, 2nd Edition

2

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