



CORE-INFO: bruises on children

The information in this leaflet is based on a systematic review of all the quality work in the world literature about bruising on children. Bruising is the most common injury to a child who has been physically abused. These key messages should help you to know when to be concerned about bruising on children.

What do we know about bruising?

- Bruising is strongly related to mobility.
- Once children are mobile they sustain bruises from everyday activities and accidents.
- Bruising in a baby who is not yet crawling, and therefore has no independent mobility, is very unusual.
- Only one in five infants who is starting to walk by holding on to the furniture has bruises.
- Most children who are able to walk independently have bruises.
- Bruises usually happen when children fall over or bump into objects in their way.
- Children have more bruises during the summer months.

Where would you expect to see bruising from an accidental injury?

- The shins and the knees are the most likely places where children who are walking, or starting to walk, get bruised.
- Most accidental bruises are seen over bony parts of the body – eg, knees and elbows – and are often seen on the front of the body.
- Infants who are just starting to walk unsupported may bump and bruise their heads – usually the forehead, nose, centre of their chin or back of the head.
- It is common to have fractures, particularly rib or metaphyseal fractures, without any bruising.

When should you be concerned?

There are some patterns of bruising that may mean physical abuse has taken place.

- Abusive bruises often occur on soft parts of the body – eg, cheeks, abdomen, back and buttocks.
- The head is by far the commonest site of bruising in child abuse.

- Clusters of bruises are a common feature in abused children. These are often on the upper arm, outside of the thigh, or on the body.
- As a result of defending themselves, abused children may have bruising on the forearm, face, ears, abdomen, hip, upper arm, back of the leg, hands or feet.
- Abusive bruises can often carry the imprint of the implement used or the hand.
- Non-accidental head injury or fractures can occur without bruising.
- Bruises which have *petechiae* (dots of blood under the skin) around them are found more commonly in children who have been abused than in those injured accidentally.
- Severe bruising to the scalp, with swelling around the eyes and no skull fracture, may occur if the child has been “scalped” – ie, had their hair pulled violently.

Can you age a bruise accurately?

The answer is no. Estimates of the age of a bruise are currently based on an assessment of the colour of the bruise with the naked eye. The accuracy of observers who estimate the age of a bruise visually is no better than 50 per cent. The evidence is that we cannot accurately age a bruise from an assessment of colour – from either a clinical assessment or a photograph. A practitioner who offers a definitive estimate of the age of a bruise in a child by assessment with the naked eye is doing so from their own experience without adequate published evidence.

Implications for practice

A bruise should never be interpreted in isolation and must always be assessed in the context of the child’s medical and social history, developmental stage and explanation given. Any child who has unexplained signs of pain or illness should be seen promptly by a doctor.

Bruising that suggests the possibility of physical child abuse includes:

- bruising in children who are not independently mobile
- bruising in babies
- bruises that are seen away from bony prominences
- bruises to the face, back, abdomen, arms, buttocks, ears and hands
- multiple bruises in clusters
- multiple bruises of uniform shape
- bruises that carry an imprint – of an implement or cord
- bruises with *petechiae* (dots of blood under the skin) around them.

This leaflet is based on the work of the Welsh Child Protection Systematic Review Group who are engaged in a rolling programme of systematic reviews of published research literature on aspects of physical child abuse.

This is a collaborative project between the Department of Child Health – Cardiff University and the NSPCC.

For full details and the latest information on the systematic reviews, visit the CORE-INFO website www.core-info.cf.ac.uk

Systematic review updated in June 2009.
Core-info leaflet updated in July 2009.

You can download the leaflet online at:

www.nspcc.org.uk/core-info

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