

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 such as the 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.
- Accidental bruising in children with disability is related to the child's level of mobility, equipment used, muscle tone and learning ability.

#### 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 such as the abdomen, back and buttocks.
- The head is by far the commonest site of bruising in child abuse.
   Other common sites include the ear and the neck.

- As a result of defending themselves, abused children may have bruising on the forearm, upper arm, back of the leg, hands or feet.
- 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.
- 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.
- Abusive bruises can often carry the imprint of the implement used or the hand.
- Non-accidental head injury or fractures can occur without bruising.
- 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.

## **Further support from the NSPCC**

If you are worried about a child, the NSPCC is here to help, 24 hours a day, seven days a week, free of charge.

Phone 0808 800 5000
Email help@nspcc.org.uk
Text 88858 (Text 07786 200001 in Channel Islands, standard call rates apply)
Or visit www.nspcc.org.uk/help

#### **NSPCC's information service**

The NSPCC's library is the most comprehensive collection of specialist resources relating to child protection in the UK. It contains over 40,000 records and you can access it online at www.nspcc.org.uk/inform

You can also subscribe to CASPAR, a news service that signposts you to the latest policy, practice, and research in child protection.

#### Sign up at www.nspcc.org.uk/inform

To download this leaflet for free, or for printed copies of this leaflet, please go to www.nspcc.org.uk/core-info for price details.

Systematic review updated July 2012. Core-info leaflet updated November 2012.

For the most up to date information on this review and the project's other systematic reviews visit the Core info website **www.core-info.cardiff.ac.uk** 

Further details of this review can be found by scanning the QR code below.

This is a collaborative project between the Early Years Research Programme, Cochrane Institute of Primary Care & Public Health, School of Medicine, Cardiff University and the NSPCC.



