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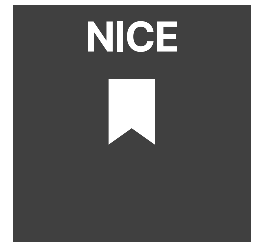

2024 exceptional surveillance of child maltreatment: when to suspect maltreatment in under 18s (NICE guideline CG89)

Surveillance report

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Surveillance decision

We propose an update to recommendation 1.1.2 in the NICE guideline on child maltreatment.

Reason for the exceptional review

NICE were contacted by the Department of Health and Social Care (DHSC) and asked to consider the recommendations made in the Child Safeguarding Practice Review Panel's Bruising in non-mobile infants (September 2022). The review specifically references NICE's guideline on child maltreatment and made the following recommendations:

1. We recommend that the guidance is extended to all professionals, including in children's social care, early years settings and the police.
2. We recommend that the guidance is clarified to define clearly what is meant by a child not being independently mobile. This should specifically recognise a child who is unable to move independently through crawling, cruising or bottom shuffling. Particular attention should be given to the risks in those children who are unable to roll over.
3. In the longer term, we recommend that DHSC works with NICE and the Royal College of Paediatrics and Child Health (RCPCH) to review the evidence and how that has informed the current NICE guidance, to consider ways to strengthen the evidence base, and to consider whether the current guidance could be updated to present a more consistent and clearer message, avoiding the dangers of over-intervention while retaining a critical stance.

NICE responded to this enquiry by email as follows:

1. The NICE guideline on child maltreatment is intended for healthcare professionals. The full guideline also says 'In addition, this guidance may be of interest to professionals working in social services and education/childcare settings.' (page 18). NICE's guideline on child abuse and neglect is for 'All practitioners whose work brings them into contact with children and young people, including those in early years, social care, health (including staff in A&E and health drop-in settings), education (including schools), the police, the voluntary and community sector,

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youth justice services and adult services (sections 1.1 to 1.3 only). Practitioners with specific roles in assessing risk and need, providing early help and interventions to children, young people, parents and carers. Commissioners and managers of services for children and young people' The guideline on child abuse and neglect covers recognising and responding to abuse and neglect in children and young people aged under 18. It covers physical, sexual and emotional abuse, and neglect. The guideline aims to help anyone whose work brings them into contact with children and young people to spot signs of abuse and neglect and to know how to respond. It also supports practitioners who carry out assessments and provide early help and interventions to children, young people, parents and carers. The overview page also states that 'Clinical features of abuse and neglect (including physical injury) are covered in NICE's guideline on child maltreatment. Recommendations relevant to both health and social care practitioners appear in both guidelines.' NICE's guideline on child abuse and neglect also cross-refers to NICE's guideline on child maltreatment and other associated guidelines where appropriate (for example recommendation 1.3.3).

2. We are aware that there is no standard definition of 'independently mobile' and that terms such as 'pre-mobile' and 'non-mobile' have been used by others. NICE's guideline on child maltreatment uses evidence from the systematic review by Maguire and this delineates between infants who are not crawling and those who are. The guideline emphasises taking into account the motor development of the child when distinguishing between accidental and non-accidental bruising.

3. NICE's guidelines on child maltreatment and child abuse and neglect both make recommendations for research in areas where there are uncertainties or in which robust evidence is lacking.

Given this enquiry, NICE also conducted this exceptional surveillance review in relation to bruising in children who are not independently mobile.

Methods

The exceptional surveillance review process consisted of:

- Considering the Child Safeguarding Practice Review Panel's Bruising in non-mobile infants (September 2022).
- Considering the evidence used to develop the guideline.

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- A rapid search for new evidence and ongoing research.
- Examining the NICE event tracker for relevant ongoing and published events.
- Feedback from topic experts.
- Feedback from the NICE clinical adviser.
- Examining related NICE guidance and quality standards.
- Assessing new information, topic expert feedback, and clinical adviser feedback against current recommendations to determine whether or not to update sections of the guideline, or the whole guideline.

For further details about the process and the possible update decisions that are available, see ensuring that published guidelines are current and accurate in developing NICE guidelines: the manual.

Information considered when developing the guideline

The 2009 full guideline included 1 systematic review by Maguire et al. 2005 (n=23 studies). The committee supported the conclusions of the systematic review but noted that it is important to exclude bruises from everyday activity, accidental injury, meningococcal septicaemia and other blood disorders that may appear as signs of bruising before suspecting child maltreatment. The committee considered that the developmental stage of the child is a reasonable indicator for suspicion, in that if a child is unable to move independently, bruising is unlikely to be accidental unless there is good history of an accident.

Information considered in previous surveillance of this guideline

The 2019 surveillance review identified 2 studies on childhood bruising (Hibberd et al. 2017, Kemp et al. 2015), together with the systematic review undertaken by the RCPCH on bruising in 2017 (which included Kemp 2017). The surveillance review found that the evidence was consistent with guideline recommendations.

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New evidence

A pragmatic search was conducted which identified the following new evidence.

The updated RCPCH review (Bruising: systematic review 2020) found 2 new studies that met the inclusion criteria (Hibberd et al. 2017 and Collins et al. 2017), in addition to the previously included studies. The review found that bruising was the most common injury in children who have been abused. It is also a common injury in non-abused children, with the exception to this being pre-mobile infants where accidental bruising is rare (0 to 1.3%). There is no change in the evidence that it is not possible to age a bruise based on a naked eye assessment. The authors noted that bruising could be a sentinel injury in children before recognition of child abuse.

A prospective study in the USA (Feldman et al. 2020) looked at the causes of bruises in pre-mobile infants (63 infants with initially explained bruises and 46 infants with initially unexplained bruises). The study found that half of pre-mobile infants with initially unexplained bruises were found to be abused. The authors concluded that physicians often do not obtain full abuse evaluations in pre-mobile infants with unexplained bruising. They concluded that bruised infants should have full abuse evaluations and referral for protective services and police assessments.

Another study conducted in the UK (Kemp et al. 2021) assessed the TEN4 screening tool, in which bruises to the torso, ear or neck, or any bruise in <4-month-old children, inform the TEN4 screen test result, which is then used to differentiate between abuse, accidents or inherited bleeding disorders (IBDs). The authors found that any bruise in a pre-mobile child was more likely to be from abuse or IBD than accident (n=780 children). In children <48 months of age a positive TEN4 screen gave estimated sensitivity of 69% and specificity of 74% for identifying abuse. The authors concluded that the data support further child protection investigations of a positive TEN4 screen in any pre-mobile children with a bruise and in mobile children with more than 1 bruise, but IBD needs to be excluded in these children.

Overall, these new studies appear to be broadly in line with guideline recommendations for children who are not independently mobile as recommendation 1.1.2 states: 'Suspect child maltreatment if there is bruising or petechiae (tiny red or purple spots) that are not caused by a medical condition (for example, a causative coagulation disorder) and if the explanation for the bruising is unsuitable. Examples include, bruising in a child who is not independently mobile.'

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Topic expert feedback

Seven topic experts were contacted by NICE and asked for their views on the issues raised by the DHSC in relation to bruising in children who are not independently mobile. Four topic experts responded. All 4 topic experts considered that there is a need to define what is meant by 'not independently mobile'. However, 1 expert explained that there is a lack of consensus in the published research about the precise meaning of 'independent mobility'. Because of this, it is not currently possible for the guideline to include a definition that would be evidence-based. The expert thought that there is a need for a Delphi consensus process to address this issue. In the absence of this work, the expert explained that clinicians adopt a pragmatic view of what is interpreted as 'not independently mobile'.

Two experts thought that the guideline has the right balance and is clear about when to suspect child maltreatment in children who are not independently mobile and present with bruises. However, 2 experts considered that the guideline is not clear enough. One expert said that the guideline needed to be clearer for children with additional physical needs. Another expert was uncertain what an 'explanation of the bruising is unsuitable' means in practice and queried what explanation would be suitable. They also noted that the guideline does not adequately cover children who are disabled or from minority ethnic backgrounds who may present differently.

Two of the experts did not consider that the guideline recommendations on bruising in children who are not independently mobile needed updating, but 2 experts did consider that an update was warranted. None of the experts were aware of any ongoing studies but an expert submitted 4 published studies for consideration, each of which is briefly summarised.

One prospective observational study (Pierce et al. 2016) looked at the prevalence of bruising in infants (n=88 bruised infants) in the emergency department. The authors found that bruising prevalence in children 12 months and younger who were evaluated in paediatric emergency departments was low, but increased within age strata, and was most often associated with a trauma. Paediatric emergency medicine clinicians obtained abuse evaluations on 23% of infants with bruising, and that rate increased to 50% for infants 5 months and younger.

One study (Bilson and Talia 2022) provided an analysis of the procedures adopted by statutory safeguarding partners throughout England in response to finding bruising in pre-mobile children. The authors questioned the validity of the idea that bruising in pre-mobile

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children is rare. They also highlighted the lack of a definition of pre-mobile and the difference in rates of bruises observed at a single time point (which might be very low), compared with over a longer period of time (which is potentially much higher). They noted that procedures varied across the country with some instances of bruising in pre-mobile children mandating a child protection investigation, which the authors did not feel was appropriate given the evidence base or section 47 of the Children Act 1989. An earlier review of 91 English children's services (Bilson 2018) likewise found that the research on bruises in pre-mobile children was limited and contradictory. Many local policies required all pre-mobile children found with a bruise to be seen urgently by a paediatrician, and in some, all bruised children were subject of a formal child protection investigation.

One prospective cross-sectional study (Hibberd et al. 2017) had already been included in the 2017 surveillance review (see above) and is therefore not discussed here.

Overall, the topic experts feedback and evidence submitted highlighted the lack of a definition of children who are not independently mobile (or pre-mobile / non-mobile), the uncertainty in the evidence base over the risk of bruising in pre-mobile infants, and high variability in policies in how clinicians and front-line staff respond to a bruise in a pre-mobile infant.

Other relevant NICE guidance

NICE's guideline on child abuse and neglect cross-refers to NICE's guideline on child maltreatment for physical injuries and other clinical indicators. NICE's quality standard on child abuse and neglect does not have any quality statements on bruising in children who are not independently mobile.

Equalities

An equalities and health inequalities assessment was completed during this surveillance review. See appendix A for details.

Overall decision

We propose an update to recommendation 1.1.2 in the NICE guideline on child maltreatment. The update should include an expert consensus definition for 'a child who is not independently mobile'. This definition will also be applicable to recommendations 1.1.5

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and 1.1.6 in the guideline.

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