Guidelines for the management of babies who are accidentally dropped in hospital: have these been developed in your service?

British Association of Perinatal Medicine
infant
PATIENT SAFETY
Working together

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In May 2019 NHS Improvement published the patient safety alert *Assessment and Management of Babies who are Accidentally Dropped in Hospital* (**FIGURE 1**).[1] The alert was initiated following concerns raised by a consultant neonatologist about an increase in the number of accidentally dropped babies in his organisation. A search of the National Reporting and Learning System (NRLS) for a recent 12 month period identified:

- 182 babies who had been accidentally dropped in obstetric/midwifery inpatient settings (eight with significant reported injuries, including fractured skulls and/or intracranial bleeds)
- 66 babies accidentally dropped on paediatric wards
- two babies accidentally dropped in mother and baby units in mental health trusts.

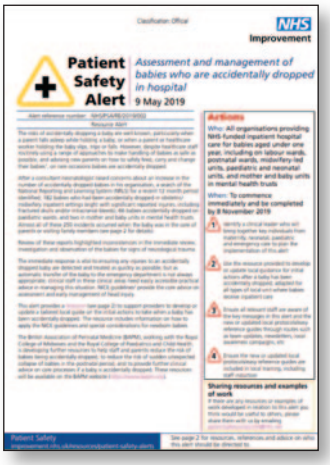
Almost all of these 250 incidents occurred when the baby was in the care of parents or visiting family members.

A review of these reports highlighted inconsistencies in the immediate review, investigation and observation of the babies for signs of neurological trauma. The immediate response is vital to ensuring any injuries to an accidentally dropped baby are detected and treated as quickly as possible, but as automatic transfer of the baby to the emergency department is not always appropriate, clinical staff in these clinical areas need easily accessible practical advice in managing this situation. National Institute for Health and Care Excellence (NICE) guidelines provide the core advice on assessment and early management of head injury.[2]

The alert provided a resource to support organisations to develop or update a tailored local guide on the initial actions to take when a baby has been accidentally dropped, including information on how to apply the NICE guidelines and special considerations for newborn babies (**FIGURE 2**). The actions outlined in the alert were for organisations to:

- identify a clinical lead to coordinate key individuals from all relevant specialties and plan the implementation of this alert
- develop or update local guidance
- ensure staff are aware of the new/updated guidance
- ensure the new/updated guidance is included in local training, including staff induction.

These tailored local guides are vital as many staff working in maternity and neonatal services may only encounter the situation once in their working life. Planning ahead so that everything that might be needed, from where to care for the baby while observations are being carried out, how to order a CT scan, and what information the parents need once their baby can go home, has been thought through and clearly laid out for easy reference. The local guidelines will make a real difference to the speed and effectiveness of care.



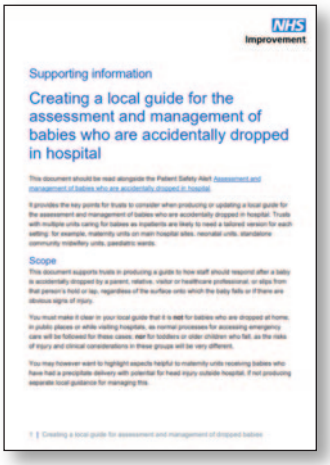


FIGURE 1 (above) Last year's patient safety alert.

FIGURE 2 (above right) The resource for supporting providers to develop or update tailored local guides on the initial actions to take when a baby has been accidentally dropped.

The actions outlined in the alert needed to be completed by 8 November 2019, so ask yourself:

- are you aware of this patient safety alert?
- do you know if your organisation has developed or updated its local guideline relating to the management of babies who are accidently dropped in hospital?
- if it has, are you familiar with its content?
- does it help you to know what to do if a baby is accidently dropped while you are at work?

If you have any concerns relating to the management of babies accidentally dropped at work, or how your organisation has implemented the national patient safety alert, you should raise these concerns with your line manager.

In addition to the alert and its associated supporting resource, the British Association of Perinatal Medicine (BAPM), working with the Royal College of Midwives and the Royal College of Paediatrics and Child Health, is developing further resources to help staff and parents reduce the risk of babies being accidentally dropped. These will reduce the risk of sudden unexpected collapse of babies in the postnatal period and provide further clinical

advice on care processes if a baby is accidentally dropped. These resources will be available on the BAPM website (www.bapm.org) in due course.

National patient safety alerts rely on organisations implementing and embedding the recommended actions to help mitigate against the identified patient safety issue from reoccurring. Failure to do this means that identified patient safety issues will remain. It is vital that clinicians talk openly about potential patient safety issues within their teams and wider networks. These conversations can help build a culture of safety within an organisation – let's start the conversation today.

References

1. **NHS Improvement.** Patient Safety Alert (NHS/PSA/RE/2019/002) Assessment and management of babies who are accidentally dropped in hospital. 2019 online at: https://improvement.nhs.uk/news-alerts/assessment-and-management-of-babies-who-are-accidentally-dropped-in-hospital/
2. **NICE.** NICE guidance CG176: Head injury: assessment and early management. Updated June 2017 online at: www.nice.org.uk/guidance/cg176

RESEARCH NEWS

Hospital transfer of extremely preterm infants is associated with mortality and severe brain injury

Extremely preterm infants, born in a non-tertiary hospital and transferred within 48 hours, are at an increased risk of death or severe brain injury when compared with those born in tertiary settings, according to a study published in *BMJ*.

Helenius et al conducted an observational cohort study using population data held in the National Neonatal Research Database looking at extremely preterm infants (<28 weeks' gestation). The infants were grouped according to birth hospital and transfer within 48 hours of birth:

- upward transfer (non-tertiary to tertiary hospital, n=2,158)
- non-tertiary care (born in non-tertiary hospital; not transferred, n=2,668)
- controls (born in tertiary hospital; not transferred, n=10,866).

The main outcome measures were death, severe brain injury, and survival without severe brain injury.

Compared with controls, infants in the upward transfer group had no significant difference in the odds of death before discharge but significantly higher odds of severe brain injury and significantly lower odds of survival without severe brain injury. Compared with controls, infants in the non-tertiary care group had significantly higher odds of death but no significant difference in the odds of severe brain injury or survival without severe brain injury. Compared with infants in the upward transfer group, infants in the non-tertiary care group had no significant difference in death before discharge but significantly lower odds of severe brain injury and significantly higher odds of survival without severe brain injury.

When women at risk of extreme preterm delivery present at non-tertiary hospitals, transfer to a tertiary hospital can occur either before or after delivery, following stabilisation of the infant. Early

postnatal transfers are increasingly common in the UK following the introduction of highly specialised neonatal transfer services. This study indicates that perinatal services should promote pathways that facilitate delivery of extremely preterm infants in tertiary hospitals in preference to postnatal transfer.

Reference

Helenius K, Longford N, Lehtonen L, Modi N, Gale C. Association of early postnatal transfer and birth outside a tertiary hospital with mortality and severe brain injury in extremely preterm infants: observational cohort study with propensity score matching. BMJ 2019;367:l5678.

DNA testing on the NHS to fast track diagnosis for critically ill babies and children

The NHS in England is providing a new form of DNA test capable of rapidly diagnosing rare diseases for critically ill babies and children.

The technique, known as whole exome sequencing, will much more rapidly diagnose rare diseases. Eighty babies and children have received this new test, with almost half being given a diagnosis for their rare disease. It is anticipated that up to 700 babies and children will benefit each year.

Exome sequencing looks for and can identify a range of potentially life-threatening conditions all in one go, rather than standard tests which are usually limited to looking for specific conditions. Delivered from the South West Genomic Laboratory Hub, the tests may more than double the chances of a successful diagnosis and are faster than standard practice where multiple tests may be performed one at a time, and can reveal what is wrong in days rather than weeks.

The testing can detect rare neurological, metabolic or other conditions by identifying genetic mutations and helps to show which patients are unlikely to respond to particular treatments – saving unnecessary medication and potential side effects.

Exposure to multiple antibiotics in infancy is associated with allergic disease in childhood

Antibiotic administration negatively affects the microbiome by decreasing bacterial diversity and this may be associated with allergic disease. A study published in *JAMA Pediatrics* investigated whether exposure to multiple antibiotic classes in infancy is associated with a higher risk of developing allergic disease in early childhood. The retrospective cohort study followed up 798,426 children looking for any allergic diseases and/or related conditions. Researchers found that all the antibiotic types assessed were associated with an increased risk of allergic disease in childhood, including penicillin, penicillin with a β-lactamase inhibitor, cephalosporins, sulphonamides and macrolides. Children prescribed an additional class of antibiotic demonstrated a further increased likelihood of diagnosis of allergic disease in later childhood.

Reference

Zven SE, Susi A, Mitre E, Nylund CM. Association between use of multiple classes of antibiotic in infancy and allergic disease in childhood. JAMA Pediatr 2019; doi:10.1001/jamapediatrics.2019.4794.