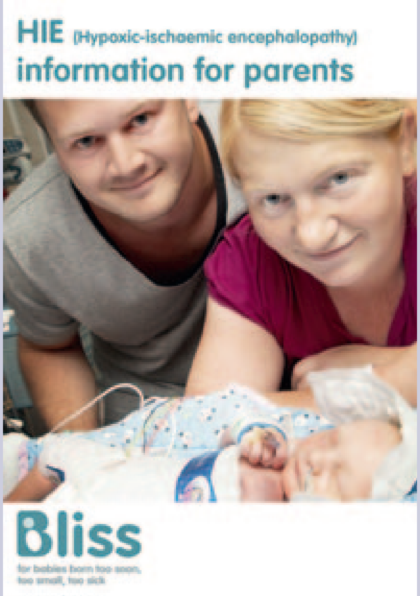
HIE information for parents

The Bliss hypoxic-ischaemic encephalopathy (HIE) booklet, co-published with the Neonatal Neuroprotection Team in the East of England, provides information for parents whose baby has been affected by HIE. The book describes the possible causes of HIE and the various treatment options, including cooling.

Parents should always be involved in decisions made about their baby's care. A book explaining why their baby is unwell and the tests and procedures that may be needed can help parents feel less alone and restore them to the centre of caring for their baby. Reading about the experiences of other parents can help many parents feel reassured.

For further information or to download a copy of the booklet, visit www.bliss.org.uk



Delegates at the Transitional Care – Cutting the Cord conference in Birmingham. From left are Leif Nelin, Tonse Raju, David Hutchon and Viktoria Nelin.

Delayed cord cutting gains further support

At an international conference organised by Dr David Hutchon and hosted by the University of Birmingham, clinicians argued that delaying cutting of the umbilical cord by at least 30 seconds is safer for a newborn baby.

At present, NHS guidelines advise that the umbilical cord should be clamped and cut as quickly as possible so that drugs (which may be harmful to the baby) can be given to the mother, and the baby can be taken away for airway clearing.

However, if the umbilical cord is left attached, the newborn baby will receive a substantial boost of blood from the placenta – as much as a 32% increase in blood volume. This may protect the baby from iron deficiency anaemia and, potentially, irreversible developmental delay. This can be especially beneficial for preterm and compromised babies.

Many medical bodies and senior doctors are moving away from immediate clamping. The National Childbirth Trust, the Royal College of Midwives, the World Health Organization and the Royal College of Obstetricians and Gynaecologists are all in favour of delayed cord-clamping. Meanwhile, the National Institute for Health and Care Excellence, which currently supports early cord-clamping, is updating its guidelines so watch this space.

MRI: a viable alternative to standard autopsy

Using magnetic resonance imaging (MRI) and blood tests to establish the cause of death in fetuses, newborn babies and infants is virtually as accurate as a standard autopsy, according to a paper published in *The Lancet*.

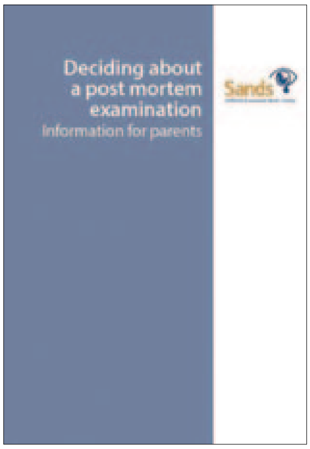
The study, led by Dr Sudhin Thayyil and Professor Andrew Taylor of UCL and Great Ormond Street Hospital, found that full-body MRI scans combined with non-invasive investigations were as effective as a standard autopsy in 90% of cases[1].

Despite evidence that post-mortem investigations provide new and useful information in the majority of cases, many parents refuse consent to a post-mortem because of the traumatic nature of the procedure at a time of great distress.

Sands, the stillbirth and neonatal death charity, welcomed the findings of this study. Charlotte Bevan, Sands Senior Research Officer, says: "Giving parents the option to have a less invasive but equally informative investigation will not only make the decision easier for parents, but could lead to an increase in post-mortem uptake and vastly improved research into why so many babies are stillborn or die shortly after birth."

Reference

1. **Thayyil S. et al.** Post-mortem MRI versus conventional autopsy in fetuses and children: a prospective validation study. *Lancet* 2013 DOI:10.1016/S0140-6736(13)60134-38.



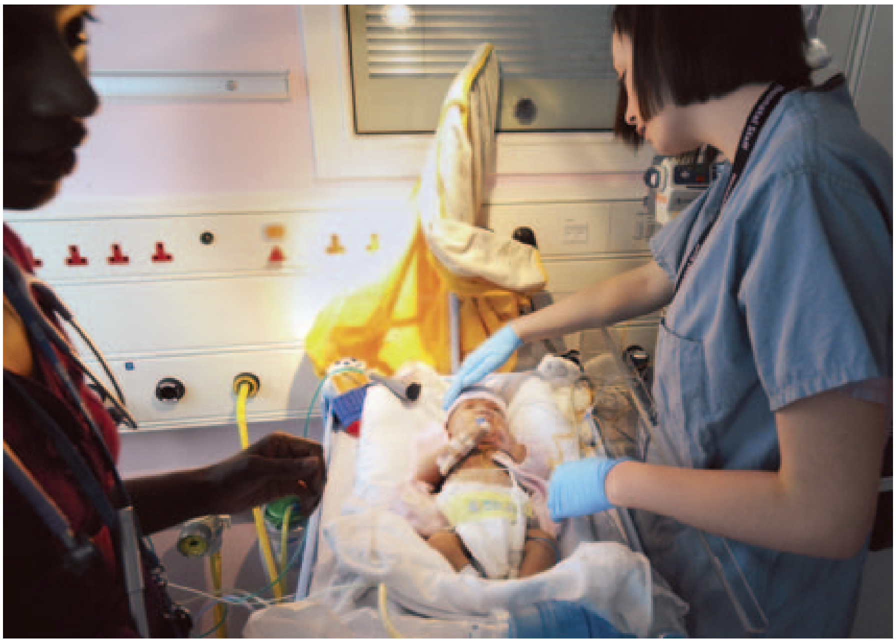
A handbook for parents – part of the recently launched Sands post-mortem consent package.

Bliss supports parental engagement in research

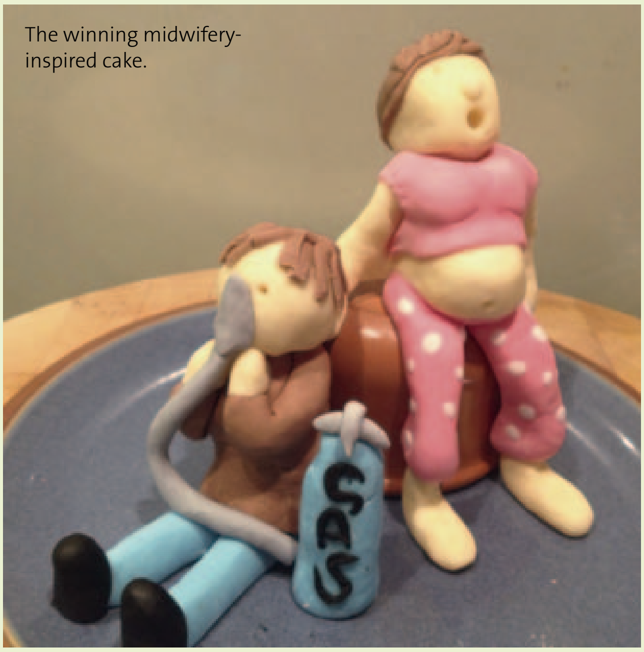
Bliss, the special care baby charity, is working collaboratively with the Medicines for Children Research Network (MCRN), researchers in the neonatal field and parents to positively promote research on the neonatal unit and ensure parents are effectively engaged.

There is often uncertainty and resistance among parents when asked if their baby might join a trial. Bliss would like to ensure that parents have a greater understanding of the value of research and its importance on the neonatal unit.

Bliss recently conducted a survey to identify the types of neonatal research taking place and how units are currently engaging with parents. From the results of the survey and the needs specified by researchers, a set of resources (including templates and guidance for research teams and other health professionals) will be produced for use on the units. Through a parents' forum, parents of premature or sick babies will be involved to ensure health professionals are providing clear information on research trials and giving parents and families the confidence to involve their babies.



For more information, please contact Katie Nania at Bliss on 020 7378 1122 or email katien@bliss.org.uk



The winning midwifery-inspired cake.

The icing on the cake

A selection of midwifery-themed cakes, ranging from a scarlet-coloured placenta cake to a stomach-shaped cake with detachable fetus, were among the many cakes made by midwives to help raise funds for the International Confederation of Midwives.

The Royal College of Midwives (RCM) asked its members to get baking to give birth to midwifery-inspired cakes. The cakes were judged by RCM Facebook followers and the one with the most 'likes' won a ticket to the RCM Annual Conference.

The winning cake, by Alison Searle of University Hospital Coventry and Warwickshire NHS Trust, featured two marzipan figures – a woman in labour and her gas-inhaling partner.

Non-invasive test reliably detects Down's syndrome

Routine screening using a non-invasive blood test for fetal cell-free DNA (cfDNA) in a pregnant woman's blood reliably detects Down's syndrome (trisomy 21) and other genetic fetal abnormalities in the first trimester, according to two studies published in *Ultrasound in Obstetrics & Gynecology*[1,2].

Cell-free DNA fragments are short fragments of DNA found in the blood. During pregnancy, there are fragments from both the mother and fetus in the maternal circulation. Current screening for Down's syndrome and other trisomy conditions includes a combined test carried out between the 11th and 13th weeks of pregnancy, which involves an ultrasound screen and a hormonal analysis of the pregnant woman's blood. Only chorionic villus sampling and amniocentesis can definitely detect or rule out fetal genetic abnormalities, but these are invasive to the pregnancy and carry a risk of miscarriage.

The studies, by Kypros Nicolaides and colleagues at the Harris Birthright Research Centre for Fetal Medicine at King's College London, showed that both cfDNA and combined testing detected all trisomies, but cfDNA testing gave far fewer false-positive results than combined testing. Another major advantage of cfDNA testing is the reporting of results as very high or very low risk, which makes it easier for parents to decide about invasive testing.

References

1. **Gil M.M. et al.** Implementation of maternal blood cell-free DNA testing in early screening for aneuploidies. *Ultrasound Obstet Gynecol* 2013; DOI:10.1002/uog12504.
2. **Nicolaides K.H. et al.** First-trimester contingent screening for trisomy 21 by biomarkers and maternal blood cell-free DNA testing. *Ultrasound Obstet Gynecol* 2013; DOI:10.1002/uog.12511.

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