Unnecessary induction of labour increases risk of caesarean section and other complications

A new study published in the journal *Acta Obstetricia et Gynecologica Scandinavica*[1] reveals that induction of labour at term in the absence of maternal or fetal indications increases the risk of caesarean section and other postpartum complications for the woman, as well as neonatal complications.

Induction of labour is common and increasing over time in many countries. A large proportion of women are induced for social and other non-recognised reasons.

Researchers at the University of Adelaide's Robinson Institute performed a cohort study of 28,626 women with spontaneous onset of labour, induction of labour for recognised indications, and induction of labour for non-recognised indications. Induction of labor for non-recognised indications was associated with a 67% increased relative risk of caesarean section (compared with spontaneous labour). It also significantly increased the chance of the infant requiring neonatal intensive care unit care (an increased relative risk of 64%) or treatment (an increased relative risk of 44%) when compared with spontaneous labour onset.

Overall, for the best maternal health outcomes, the lowest risk of requiring epidural or spinal analgesia occurred with birth at or after 41 weeks' gestation, while the lowest risk of sustaining a severe perineal tear was associated with delivery after 37 weeks' gestation, and labour complications were at a minimum beyond 38 weeks' gestation. This indicates that the lowest risk of adverse maternal and infant outcomes occurred with birth between 38 and 39 weeks and with the spontaneous onset of labour.

1. **Grivell R et al.** Maternal and neonatal outcomes following induction of labor: a cohort study. *Acta Obstetricia et Gynecologica Scandinavica;* DOI:10.1111/j.1600-0412.2011.01298.x.

Reducing late diagnoses of children's diseases

The NHS Newborn and Infant Physical Examination (NIPE) Programme has been running a pilot study involving 17 NHS Trusts in England, designed to reduce the late diagnoses and treatment of medical conditions detected in newborn babies following the newborn physical examination carried out shortly after birth.

As part of the pilot, staff are using a specially designed IT system to capture information from the newborn physical examination. The system highlights late or missed examinations and will also enable timely referrals should further monitoring, investigation or treatment be needed. During the course of the pilot it is expected that the examinations of some 29,000 babies, across England, will be recorded on this system.

The newborn physical examination screens for problems of the heart, hips, eyes and testes that are present at birth. The quality of this screening test has, in the past, varied across the country, sometimes resulting in late diagnoses. The pilot study aims to address this.

Professor Adrian Davis OBE, Director of the NIPE Programme, said: "Late diagnoses can have a devastating impact on children and their families, leading to more severe and traumatic treatment including multiple operations over many years. I am delighted that so many hospitals and maternity sites are helping us with this national pilot which, I believe, could really have a dramatic impact."

The pilot has now been completed and a formal evaluation of the data is being carried out, results will be available soon. If the pilot is found to be successful then the NIPE Programme will offer the same improvements to all other newborn physical screening services throughout England.

Infant exhibiting typical signs of liver disease – yellow tinge to whites of the eyes and an enlarged abdomen.

Latest Evidence Update from NHS Evidence – Neonatal jaundice

'Neonatal jaundice: Evidence Update March 2012' is the latest of a new style Evidence Update from NHS Evidence – a service provided by NICE – which focuses on a summary of selected new evidence relevant to NICE clinical guideline 98 'Neonatal jaundice' (2010).

While Evidence Updates do not replace current accredited guidance they do highlight new evidence that might generate a future change in practice.

By producing these Evidence Updates NHS Evidence seeks to reduce the need for individuals, managers and commissioners to search for new evidence and to inform guidance developers of new evidence in their field.

In producing the Evidence Update, more than 200 pieces of evidence were searched of which nine have been chosen for publication. An Evidence Update Advisory Group, comprised of subject experts, has reviewed the prioritised evidence and provided a commentary.

Neil Marlow, Professor of Neonatal Medicine, UCL EGA Institute for Women's Health said, 'This new evidence update on Neonatal Jaundice confirms the robust status of the existing NICE guideline and contains a range of studies which confirm current practice."

Evidence Updates will build over time to consider a number of topics and NHS Evidence welcomes feedback from societies and individuals in developing this service.

Evidence Updates do not replace current accredited guidance and do not provide formal practice recommendations.

'Neonatal jaundice: Evidence Update March 2012' can be found at www.evidence.nhs.uk/evidence-update-8.

World's biggest ever cleft lip and palate research programme

Parents of children born with a cleft lip and/or palate are being invited to enrol in the world's largest ever cleft research programme. The Universities of Bristol and Manchester will lead the research in partnership with a number of other universities and NHS partners including UWE Bristol.

Cleft is one of the most common congenital abnormalities in the world, affecting 1,200 children born in the UK every year, but little is known about its causes, with opinion divided on best treatments.

The five-year UK research programme, costing £11 million and called The Cleft Collective, is the biggest single investment in cleft research anywhere in the world. The project will involve the largest DNA gene bank of its kind being set up at the University of Bristol. The aim is to collect DNA from all cleft children born in the UK from autumn 2012, and the programme will follow their development through to adulthood.

Professor Jonathan Sandy, lead researcher for the Bristol gene bank and Head of the University of Bristol's School of Oral and Dental Sciences, said: "Children born with cleft often face unique challenges. These include speech and language issues, educational difficulties and broader health concerns. We do not know if these problems are caused by the genes that may be responsible for cleft or by other factors, such as lifestyle or 'environmental' factors. This study will help answer these important questions and could also solve the ultimate mystery of what causes cleft in the first place."

Researchers at the Centre for Appearance Research (CAR) Bristol will examine the psychological impact on parents of children with cleft palate at diagnosis and provide an analysis of ongoing support needs.

The University of Manchester will also host a National Clinical Trials Unit for cleft to co-ordinate NHS based clinical research, improving surgical procedures, therapies and care.

Examples of isolated cleft palate: Bifid uvula (left) and cleft palate involving the bony hard plate.

Key research on feeding of premature vulnerable babies

The way premature babies are fed in hospitals could be set to change following the results of a research programme – funded by children's charity Action Medical Research – which have been published in the journal *Pediatrics*.

The trial, which looked at the issue of feeding high-risk premature babies, was co-ordinated by the National Perinatal Epidemiology Unit (NPEU) and carried out at 54 hospitals across UK and Ireland.

Dr Alison Leaf, Consultant Neonatologist and Professor Peter Brocklehurst, from the NPEU led the research study which looked at the feeding of babies born five or more weeks early, who were also smaller than they should have been for their age.

Dr Leaf, said: "These babies are a challenge to feed. Good nutrition and growth is very important, however their body organs, including the bowel, are immature. They often do not cope well with milk, and may develop severe bowel inflammation, or necrotising enterocolitis (NEC), which can make them very ill.

"Because of this, starting milk feeds is often delayed and early nutrition is given intravenously. This also has risks, particularly of infection and liver inflammation. Until now, nobody had tested whether it is better to start milk feeds early or to delay, so the project was designed to answer this question," she added.

More than 400 premature babies were involved in the study to assess whether they should be given milk feeds early, or later, in a bid to reduce risks to their health. Half the babies started milk feeds on day 2 after birth, and the other half on day 6 after birth.

Full feeding was achieved earlier in the babies who started milk feeds on day 2. On average, these babies no longer needed an IV drip for feeds three days earlier than the babies starting milk feeds on day 6. There was no difference in the number of babies experiencing severe bowel problems, including NEC, between those who had early feeds and those who started later.

Professor Brocklehurst concluded: "Early feeding appears to be better for these high risk babies. This research will enable more high risk premature babies to be fed early, and to achieve full feeding earlier. This will reduce the need for intravenous drips and infusions."

Changes to guidance for Maternity Allowance for bereaved mothers of stillborn babies

Sands, the stillbirth and neonatal death charity, and the charity, Working Families, are delighted that following consultation with the Department of Work and Pensions, the Department is making changes to Maternity Allowance guidance, to ensure that mothers whose babies are stillborn, (died after more than 24 completed weeks into pregnancy), receive benefits they are legally entitled to.

There was some confusion over the way stillbirth was defined, as in the legislation covering benefits the expected date of delivery was defined in weeks rather than days, with a week starting on a Sunday. This led to some mothers whose baby was registered as a stillbirth missing out on the benefit they were entitled to. In future bereaved parents will only have to produce evidence of stillbirth by way of a stillbirth certificate when claiming Maternity Allowance and Statutory Maternity Pay.

More information at www.dwp.gov.uk/publications/specialist-guides/technical-guidance/ni17a-a-guide-to-maternity/