

## Premature babies benefit from starting milk feeds early

High-risk premature babies are vulnerable to severe bowel problems, which has led previously to a tendency to delay the start of milk feeds. However, the way these babies are fed in hospitals could be set to change following the results of a new research programme (Leaf et al, 2012).

The trial, the largest to date looking at the issue of feeding high-risk premature babies, was coordinated by the National Perinatal Epidemiology Unit at the University of Oxford, and carried out at 54 hospitals across the UK and Ireland.

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.

Almost half of the babies in the trial required some respiratory support, although really sick babies were not included in the trial.

Full feeding was achieved earlier in the babies who started milk feeds on day 2. On average, these babies no longer

needed an intravenous drip for feeds 3 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 necrotizing enterocolitis, between those who had early feeds and those who started later.

The findings could also lead to babies being able to leave specialist care units earlier, freeing up vital high dependency care cots for other sick babies to use, the lead researchers have said.

Dr Leaf, who led the study and is now an Academic Consultant at the National Institute for Health Research, Southampton Biomedical Research Centre at University Hospital Southampton NHS Foundation Trust and the University of Southampton, said: 'These babies are a chal-

lenge 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 necrotizing enterocolitis, 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.

Leaf A, Dorling J, Kempley S et al; on behalf of the Abnormal Doppler Enteral Prescription Trial Collaborative Group (2012) Early or Delayed Enteral Feeding for Preterm Growth-Restricted Infants: A Randomized Trial. *Pediatrics* Apr 9 (Epub ahead of print)

### Links found between metabolic risk factors and skin cancer

Little is known about the links between metabolic aberrations and malignant melanoma and non-melanoma skin cancer, but a new study has assessed the associations between metabolic factors (both individually and combined) and the risk of skin cancer in the large prospective Metabolic Syndrome and Cancer Project (Nagel et al, 2012).

During a mean follow-up of 12 years of this cohort, 1728 (41% women) cases of incident malignant melanoma, 230 (23% women) of fatal malignant melanoma and 1145 (33% women) of non-melanoma skin cancer were identified. Most non-melanoma skin cancer cases (76%) were squamous cell carcinoma (873, 33% women).

Hazard ratios were estimated for quintiles and standardized z-scores of body mass index, blood pressure, glucose, cholesterol, triglycerides and for a combined metabolic syndrome score.

Blood pressure per unit increase of z-score was associated with an increased risk of incident malignant melanoma cases in men and women and of fatal malignant melanoma cases among women.

In men, all quintiles for body mass index above the reference were associated with a higher risk of incident malignant melanoma. In women, squamous cell carcinoma non-melanoma skin cancer risk increased across quintiles for glucose levels and there was a trend with triglyceride concentration.

This suggests that mechanisms linked to blood pressure may be involved in the pathogenesis of malignant melanoma. Squamous cell carcinoma non-melanoma skin cancer in women could be related to glucose and lipid metabolism.

Nagel G, Bjørge T, Stocks T et al (2012) Metabolic risk factors and skin cancer in the Metabolic Syndrome and Cancer Project (Me-Can). *Br J Dermatol* 24 April (Epub ahead of print)

### Endosonography more effective and cheaper for staging lung cancer

Research published by the National Institute for Health Research Health Technology Assessment programme shows that using endosonography is a more effective, cheaper and less invasive method of staging lung cancer patients.

A total of 241 lung cancer patients were randomized to receive either mediastinoscopy alone or use of two complementary techniques: endoscopic ultrasound-guided fine needle aspiration and endobronchial ultrasound-guided transbronchial needle aspiration. These techniques use ultrasound to examine the mediastinal cavity and a fine needle to take a sample of cells for analysis.

The detection rate of cancerous cells was 94% in patients who initially had an examination with endosonography and only proceeded to a surgical examination if the endosonography was negative, compared with a rate of 79% where mediastinoscopy was used alone.

Lead investigator, Dr Robert Rintoul, commented: 'The results have shown that we are able to more accurately detect whether cancer is present in the mediastinal lymph nodes using the endoscopic ultrasound and endobronchial ultrasound techniques.' The full study can be accessed online at [www.hta.ac.uk/1603](http://www.hta.ac.uk/1603)