gestation. The 3040 g female infant presented with respiratory distress. A bilateral pleural effusion rapidly re-occurred necessitating total parenteral nutrition and repeated thoracocentesis during the first 2 weeks. On day 18, a chest tube was inserted in the left side. On day 35, the accumulated volume extracted reached 1100 ml and intrapleural instillation of 5 ml povidone-iodine (Betadine Dermique 10%) was performed. The pleural effusion resolved within 24 h, but respiratory status worsened 12 h after povidone-iodine infusion with hypotension, metabolic acidosis (pH 7.1; HCO₃ 12 mmol/l), and acute renal failure. Haemodynamic instability, acidosis, and respiratory status improved within 48 h. Anuria persisted and the patient required peritoneal dialysis for 15 days. Severe chronic renal failure (creatinine clearance 20 ml/min/1.73 m²) was present 6 months later, although the patient had had normal renal function before treatment.

Because of the persistent pleural effusion, we decided on an intrapleural instillation of povidone-iodine as reported previously.¹ The pleural effusion resolved but severe adverse reactions occurred within 12 h after povidone-iodine instillation. Metabolic acidosis, hypotension, and respiratory and renal failure have been previously observed in adult and paediatric patients who had received high doses of povidone-iodine topically applied to burns covering ≥20% of the body surface area or after continuous mediastinal irrigation.^{2,3} Acute renal insufficiency is a well known effect of povidone-iodine intoxication, particularly in patients with chronic renal failure.

One of the four infants reported by Brissaud *et al* died from end stage renal failure after three intrapleural povidone-iodine instillations.¹ The autopsy showed diffuse congenital lymphangiectasis. We hypothesised that such an abnormality may have favoured massive iodine absorption and intoxication in the case reported by Brissaud *et al* as well as in our patient.

We wish to warn of the risk of severe adverse effects after povidone-iodine intrapleural injection, particularly when pulmonary lymphangiectasis is suspected. Recently, somatostatin was successfully used for post-operative chylothorax in neonates when conservative treatment failed.^{4,5} A large prospective study needs to establish the safety and efficiency of somatostatin in the treatment of persistent chylothorax.

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The importance of colour

Some months ago a lady had an uneventful first pregnancy and delivered her baby vaginally near term. Both mother and baby were transferred to the postnatal ward shortly after the birth. As the hospital is committed to the Baby Friendly Initiative, she was encouraged to establish breast feeding and to have skin to skin contact with her baby while lying on her bed. As she was extremely tired after a long labour with a spinal anaesthetic, she dozed off and her baby rolled off the bed on to the floor. Mum called the midwife to check the infant over, and she subsequently brought with her the baby's routine set of yellow baby notes so she could document what had happened. The baby was fortunately not injured, and there was no apparent bruising. However, as a precaution a skull x ray examination was performed. This showed a linear mark, which was felt to be vascular and not a fracture. Mum was made aware of this, but remained very anxious about her baby. Both mother and infant progressed well and were discharged home.

Some weeks later they attended for a follow up appointment. The infant was thriving and making good developmental progress, and, as there were no other concerns, the infant was to be discharged from the clinic. Just before leaving, Mum asked for a photocopy of the notes. We were a little surprised at this request as there had not been any adverse outcome, and no concerns had been expressed over the baby's inpatient care. We therefore enquired why she had requested them. She explained that, when the midwife had come to see her baby that she had brought a yellow set of notes. She had seen her own maternity hospital and hand held notes, which had always been white. She had not appreciated that all newborn infants had a yellow set of notes capturing basic demographic and birth related details. She had interpreted the use of the yellow set of notes as representing something very negative. Was she being marked out because her baby had rolled out of the bed? What had been written about her in the yellow notes? Would these yellow notes be on her file permanently? We explained that all newborn infants had a yellow set of notes and showed her what was written and she was reassured. Mum left the clinic (without the photocopy of her notes) feeling happier.

Intrigued by the consultation, we wondered how often the use of a simple colour

within medical notes leads to the unexpected generation of anxiety, whether this had been observed by other paediatricians or midwives, and how we might recognise this earlier and provide reassurance.

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RSV and bronchiolitis

In the study by Bala and colleagues,¹ it seems that interpretations on cost effectiveness of palivizumab are made based on the number of admissions for bronchiolitis alone.

We conducted an epidemiological study to determine the importance of respiratory syncytial virus (RSV) in the region on 412 consecutive 1 month to 2 year old children admitted to a tertiary hospital in Kelantan, Malaysia, because of lower respiratory tract infections (1 January to 31 December 2001). We based our diagnosis of RSV on viral antigen detection in nasopharyngeal aspirates from the children.

We found that in our setting only 26.2% of patients with bronchiolitis were RSV positive. On the other hand, among the patients diagnosed to have pneumonia, 21% were RSV positive. We also identified a clear seasonal trend, with a strong peak in the rainy season and RSV infection being extremely rare in the dry season.

Our data caution against just taking clinical bronchiolitis as a sole indicator of RSV infection. On one hand there may be an overestimation of RSV infection since by far not all bronchiolitis is due to RSV. On the other hand the more severe or complicated RSV infections may be missed, underestimating the burden of RSV for a given population.

Calculations on the true burden of RSV should also take into consideration the pneumonia cases resulting from or complicating RSV infection and also the potential long term effects of RSV infections.²

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Postnatal ultrasound: a minimum requirement for moderate antenatal renal pelvic dilatation

I read with interest the report by Plant *et al*,¹ in which it is suggested that children with an antenatal renal pelvic diameter of 5–15 mm do not require postnatal investigations or treatment, as their rate of renal scarring with

dimercaptosuccinic acid (DMSA) after the age of 4 years (1/189 children) was 0.5% (95% confidence interval (CI) 0 to 2.9) for both sexes combined. It is not clear, however, if their results represent antenatal renal dilatation diagnosed at 20 or 28 weeks gestation; as more than half of such findings subside between 20 and 28 weeks, the resulting calculation of prevalence of abnormalities could vary by a factor of at least 2 if the cases they reported were diagnosed at 20 weeks gestation.

Their results contrast with our findings, here described. Over a five year period, out of 355 children with antenatal pelvic dilatation at 20 weeks gestation, 137 children were found to have an antenatal renal pelvic diameter of 5–15 mm at 28 weeks gestation and were investigated postnatally while receiving antibiotic prophylaxis. Those with a defined multicystic kidney, pelvic dilatation over 15 mm, suggestive of posterior urethral valve, or with multiple congenital anomalies were not included in the study. None of the 137 children developed a urinary tract infection throughout the study period. Postnatal investigations within a few months of birth, including ultrasonographic evidence of an increase in renal pelvic diameter in 50 infants, confirmed the presence of obstructive uropathy in four children, with a prevalence of 2.9% (95% CI 0.7 to 7.4), including one child with posterior urethral valve and three with unilateral pelvi-ureteral junction obstruction. A high prevalence of obstructive uropathies has already been well documented in infants with pelvic dilatation >8 mm at 28 weeks,² well below the 15 mm upper limit suggested by Plant *et al.*¹ Renal scarring by DMSA (in the first few months of life) was found in two children with a prevalence of 1.4% (95% CI 0.1 to 5.3), and vesicoureteric reflux was diagnosed in five children with a prevalence of 3.6% (95% CI 1.1 to 8.5). No DMSA scans were carried out after the 4 years of age in our study. Without dwelling on the controversy surrounding the clinical significance (or lack of it) of vesicoureteric reflux, the relative risk of renal scarring in our series was therefore 2.75 times that in the report of Plant *et al.* (if their infants were scanned at 28 weeks gestation), but this was not statistically significant (95% CI 0.3 to 10.1; $p = 0.2$). However, and more importantly, without postnatal imaging of these children with moderate antenatal renal pelvic dilatation, four cases of obstructive uropathy (2.9% of these children) would not have been detected early nor benefited from antibiotic prophylaxis and prompt evaluation by a paediatric urologist. They may still have probably been diagnosed later, with the occurrence of obstructive symptoms or urinary tract infections, but after some possible damage to the affected kidney(s), which would have been, to some extent, preventable if the diagnosis had been made earlier. If, as in the report of Plant *et al.*, postnatal imaging had not been carried out in this cohort and the DMSA scans were carried out at 4 years of age, a higher number of infants with scarred kidneys on DMSA would be expected, in addition to the two we reported, because of potential renal damage resulting from diagnostic and therapeutic delays in the four infants with obstructive uropathies who would not have been identified in the newborn period.

Although we strongly agree that most children with moderate antenatal pelvic dilatation would not benefit from antibiotic

prophylaxis and postnatal imaging, and with the absence of other published evidence to support such a change in practice at this stage, we cannot yet agree with the recommendations of Plant *et al.* of not offering postnatal evaluation unless the antenatal pelvic dilatation is more than 15 mm, as this would miss about 3% who have an underlying obstructive uropathy. Although we recognise that invasive imaging studies with exposure to radiation, such as cystogram, DMSA, or MAG scintigraphy, may not be required in the majority, we strongly feel that a postnatal ultrasound still remains indicated in all these children, with antibiotic prophylaxis and further imaging reserved for those with persistent or worsening ultrasound findings until a significant uropathy has been ruled out. Such a strategy based on postnatal ultrasound for antenatal pelvis dilatation up to 10 mm (below the limit of 15 mm suggested by Plant *et al.*) is recommended to exclude an underlying uropathy.³

Until better criteria and/or diagnostic tools have been developed, we cannot at this stage endorse the recommendation of Plant *et al.* of avoiding any postnatal investigation in many such infants (at risk) because only a few (with significant problems) may benefit.

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Association of hydrogen peroxide in exhaled breath condensates from infants with respiratory distress syndrome with the development of chronic lung disease

We read with interest the review on exhaled breath measures of inflammation by Harrison *et al.*¹ We agree that there is a need to develop and standardise methods for the collection of exhaled breath markers as part of clinical monitoring of neonates on respiratory support. A major limitation we encountered with collecting exhaled breath condensates using a method we published earlier was that hydrogen peroxide concentrations were not significantly different between condensates from babies and “dummy” controls.² This could be a result of signal dilution of small expired gas volumes from infants by relatively large bias flow, mixture of gases, and airway humidification in the ventilator/continuous positive airway pressure circuits.²

Nevertheless, their article prompted us to analyse whether there were any trends in exhaled hydrogen peroxide concentrations from 44 ventilated infants with respiratory

distress syndrome (median gestation and birth weight of 28 weeks and 1025 g respectively) in relation to the development of chronic lung disease (CLD; oxygen requirement at 36 weeks postmenstrual age). The median hydrogen peroxide concentration in infants who developed CLD was 0.30 μM (interquartile range 0.21–0.46) compared with 0.21 μM (interquartile range 0.16–0.37) in those with resolved respiratory distress syndrome ($p = 0.042$). There was no significant correlation between fractional inspired oxygen and hydrogen peroxide concentrations.

We emphasise that these results are still inconclusive because of deficiencies in our collecting system. Further evaluation is required using more refined methods of collection. In this respect, Hitka *et al.*³ attempted to capture only expired gases from ventilated preterm infants using a double valve outlet system. This looks promising, although validation of the method with various modes of ventilation and settings, and with a larger and more diverse patient group, is necessary before exhaled hydrogen peroxide can be considered for monitoring of ventilated neonates at risk of CLD.

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Reducing the dosing frequency of aminoglycosides can increase errors

We were interested to read the meta-analysis by Nestaas *et al.*[1] which states in its title that less frequent aminoglycoside dosing is safe and effective. About two years ago at this hospital, we reviewed the literature on gentamicin dosing and made the change to a larger but once daily gentamicin dose for term infants who received antibiotics after delivery. In our hospital, we routinely give benzyl penicillin and gentamicin in combination to any newborn term infant with suspected infection. Over the succeeding months, we had a significant rise in the