We are grateful to Dr. Godfrey, for his letter has given
us the opportunity to emphasize a very important point
in the treatment of fibrosing alveolitis. A child with
fibrosing alveolitis who initially responds to cortico-
steroids may deteriorate when the dose is reduced or
stopped. As will be seen in Table 8 of our paper, 4
patients, following such a deterioration, improved on
one occasion when corticosteroid treatment was restarted
or increased. 3 of these subsequently deteriorated when
the steroid dose was again reduced or stopped, did not
then respond to a further ‘adequate’ steroid therapy and
died. 2 other patients (Cases 7 and 9) responded to mul-
tiple courses of steroids after episodes of deterioration
and have survived. It is not possible to predict which
patients will continue to be steroid-responsive and it was
this fact which led us to stress that steroid therapy for
fibrosing alveolitis in children should comprise at least a
year’s treatment and that withdrawal should be cautious
and protracted.

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Pericardial effusion complicating
umbilical venous catheterization

Sir,

Recently we encountered an unusual complication of
umbilical venous catheterization. A 3·4 kg female infant
of an insulin-dependent diabetic mother received 4 ml
of 50% dextrose by push because of hypoglycaemia
(blood glucose of 18 mg/100 ml; 1·0 mmol/l), via an
umbilical venous catheter. The infant then received 15% dextrose by continuous infusion. X-ray of the chest and
abdomen obtained subsequently showed the catheter
coiled up in the heart with the tip in the right atrium.
The catheter was pulled back into the inferior vena cava.
At 52 hours of age the infant suddenly became dusky,
had grunting respirations, and later became apnoeic and
bradycardic. She was resuscitated and placed on intermit-
tent positive pressure ventilation. Blood glucose was
103 mg/100 ml (5·7 mmol/l). Chest x-ray showed
cardiomegaly. The infant continued to do poorly and
died after 15 minutes.

At necropsy the pericardial sac was found to be dis-
tended with 28 ml clear yellow fluid. There was a small
haematoma measuring 0·2 x 0·2 x 0·1 cm in the anterior
wall of the left atrium and adjacent to this haematoma
there was a perforation measuring 0·1 cm in diameter.
Biochemical analysis of the pericardial fluid showed
sugar 3020 mg/100 ml (168 mmol/l), total protein
11·7 g/l, calcium 5·0 mg/100 ml (1·25 mmol/l), and
sodium 92 mEq/l (92 mmol/l).

The inordinate amount of glucose in the pericardial
fluid and the rent in the left atrium indicate that the fluid
reached the pericardial space during the manual infusion
of 50% dextrose. It is reasonable to assume that the
catheter tip originally was in the left atrium and that it
recoiled into the right atrium after the rapid push of the
dextrose. Though simple puncture of the atrial wall by the
catheter tip could have been the basis of the observed
complication, the cutting force of the jet stream produced
by rapid infusion seemed an alternative possibility. We
have found in vitro that when 50% dextrose is injected
rapidly through a 5 French umbilical catheter, pressures
as high as 550 mmHg may be produced.

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Rapid assessment of gestational age
at birth

Sir,

We have assessed the gestational age of 408 newborn
babies using the method of Parkin et al. (Archives, 1976,
51, 239) which is based on four external characteristics.
The mean of differences between gestational age, accord-
ing to the last period, and that assessed by the total score
was +1·26 days and the standard deviation ±8·01
days. Thus, the 95% confidence limits of ±16 days in
our series are very similar to those obtained by the above
authors. The relation of total score to gestational age is
shown in the Fig. The means of the gestational ages are
plotted against total score. 95% confidence limits for
prediction of gestational age from the score are also
shown by the horizontal lines. The curve has been drawn
by free hand. We find the method simple, quick, and
quite accurate, so that it can be used in every day clinical
practice.

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Fig. Relation of total score to gestational age.