sound, to estimate the expected date of delivery. Conversely, a good argument can be made out to estimate the delivery date by ultrasound and to use menstrual dating only to decide when to do an ultrasound examination².

This is an argument which is unlikely to be resolved—two significant digits of standard deviation is unlikely to convince anyone in the ultrasound camp to switch allegiance to the menstrual daters, or even to the 'middle ground' of only altering the menstrual dating if it differs more than seven, ten or fourteen days (whichever the case may be) from the ultrasound estimation.

Is such accuracy necessary? In the second trimester, ultrasound estimation of the gestational age improves the accuracy of biochemical screening for spina bifida and Down's syndrome. On the other hand, it can be argued that ultrasound screening can replace biochemical screening of both these conditions, without prior knowledge of the exact gestational age.

In the third trimester gestational age is of use to decide on expectant management or delivery in a complicated pregnancy. On the other hand, other factors (such as the neonatal care facilities and even the obstetrician's opinion whether the fetus is viable) have even greater influence on the neonatal outcome³. The 'accurate' estimation of the expected date of delivery by ultrasound has led to the virtual disappearance of amniocentesis to confirm lung maturity prior to elective caesarean section. Conversely, an elective delivery three days earlier or later is unlikely to have a major impact on neonatal morbidity, or on the number of women who go in to spontaneous labour before their planned caesarean section. That leaves two arguments for calculating the expected date of delivery. The first is to provide the woman (and her in-laws) with an estimation of the approximate time when she can expect to deliver. Obviously, we cannot pinpoint the spontaneous onset of delivery in advance. The second argument is to avoid unnecessary inductions of 'post term' pregnancies. Post term pregnancy is arguably an iatrogenic disease. If we did not create the false expectation of an 'expected date of delivery' and the anxiety this develops in the woman, her family and her obstetrician if she has not yet delivered by the 'expected date', the pressure for induction might be decreased.

Would any obstetrician who declines to provide a pregnant patient with an 'expected date' have any patients? An alternative might be to provide the woman with a 'Cumulative frequency of delivery' graph⁴. This graph illustrates her chance of spontaneous onset of labour by a certain date. This might avoid the anxiety generated by the tyranny of the 'expected date of delivery', while also graphically illustrating the time scale when she might reasonably expect to deliver.

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References

- Olsen O, Clausen J. Routine ultrasound dating has not been shown to be more accurate than the calendar method [commentary]. Br J Obstet Gynaecol 1997; 104: 1221-1222.
- 2 Gardosi J. Dating of pregnancy: time to forget the last menstrual period [editorial]. Ultrasound Obstet Gynecol 1997; 6: 367-368.
- 3 Vansteenkiste MA, Pattinson RC, Kirsten GF. The role of obstetric factors in determining fetal viability. S Afr Med J 1992; 10: 508-511.
- 4 Mongelli M, Wilcox M, Gardosi J. Estimating the date of confinement: ultrasonographic biometry versus certain menstrual dates. *Am J Obstet Gynecol* 1996; 1: 278-281.

A study of the quality of perinatal autopsy in the former northern region

Sir,

In the introduction to their paper on the quality of perinatal autopsy in the Northern region (Vol. 105, January 1998) Wright et al., quoting the recommendation of the RCOG/RCPath report of 1988², state that perinatal autopsy rates < 75% are unacceptable. They add that 'clinicians' will not be encouraged to press relatives for an autopsy if in their experience the quality of the autopsy is not adequate'. I feel that the time has come for this approach to be challenged. Surely the test of good perinatal care should be whether or not all bereaved parents are offered an examination of their baby and not the number who accept the offer. Furthermore, parents should not be pressed into agreeing to a postmortem examination but rather they should be given a detailed and sensitive explanation of the nature and benefits of the examination, preferably by a senior obstetrician or midwife. This should include a description of limited methods such as restricted examination of the body and medical imaging. If parents choose not to have their baby examined, this should be respected.

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References

- Wright C, Cameron H, Lamb W. A study of the quality of perinatal autopsy in the former Northern Region. Br J Obstet Gynaecol 1998; 105: 24–28.
- 2 Joint Working Party of the Royal College of Obstetricians and Gynaecologists and the Royal College of Pathologists. Report on Fetal and Perinatal Pathology. London: Royal College of Obstetricians and Gynaecologists, 1988.

Magnesium sulphate: a review of clinical pharmacology applied to obstetrics

Sir,

We congratulate Idama and Lindow on their thorough review of the clinical pharmacology of magnesium sulphate (Vol 105, March 1998)¹. We would however like to draw attention to possible adverse paediatric consequences of antenatal magnesium therapy. The MAGnet trial² examined the effects of antenatal magnesium exposure, both for tocolysis and also as a single dose in advanced pre-term labour, on subsequent cerebral palsy rates. Unfortunately, the trial had to be stopped at the interim safety monitoring stage because of an excess of paediatric deaths in the groups exposed to antenatal magnesium sulphate (risk difference 10.7%, 95% CI 2.9%-18.5%, Fisher's exact test, P = 0.02). Magnesium sulphate used in very pre-term labour may be associated with excess paediatric mortality.

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References

- Idama TO, Lindow SW. Magnesium sulphate: a review of clinical pharmacology applied to obstetrics. Br J Obstet Gynaecol 1998; 105: 260-268.
- 2 Mittendorf R, Covert R, Boman J, Khoshnod B, Lee K-S, Siegler M. Is tocolytic magnesium sulphate associated with increased total paediatric mortality? *Lancet* 1997; **350**: 1517–1518.

AUTHORS' REPLY

Sir,

We thank Drs Luckas and Aird for their interest in our review.

There is grave danger in taking the statistics of the MAGnet trial¹ at face value because on analysis of the nine deaths appar-