## CORRESPONDENCE

Correspondents are urged to write briefly so that readers may be offered as wide a selection of letters as possible. So many are now being received that the omission of some is inevitable. Letters should be signed personally by all their authors.

## Induction of Labour and Perinatal Mortality

SIR,—There has been much recent discussion regarding the pros and cons of induction of labour. It has indeed been suggested that modern active obstetric management may result in an increased perinatal mortality. We think it is therefore of interest that we should publish the statistics from the Watford Maternity Unit for the past three years (see table).

	1972	1973	1974
Total live births Total still births Total acontal deaths Total perinatal deaths Perinatal death rate (/1000) Forceps rate (%) Caesarean section rate (% Premature deliveries (%) Induction of labour (%)	2298	2251	2177
	30	21	17
	21	17	6
	51	38	23
	22·2	16·9	10·6
	7·3	11·0	12·2
	3·8	5·4	5·2
	6·7	4·7	4·4
	28	40	55

These show a dramatic reduction in perinatal mortality, from 22 per 1000 in 1972 to 11 per 1000 in 1974. It is interesting to note that during this period the induction of labour rate has risen from 28% to 55%. The rates for caesarean sections and forceps deliveries, though initially increasing, have remained virtually static in the past two years. The operative delivery rate is still low. The number of premature babies born in the unit has dropped from 7% to

It is impossible to establish one cause for the dramatic fall in perinatal mortality. We suggest that there are four major contributory factors.

- (1) Seventy per cent of all patients in this unit have continuous fetal heart rate monitoring. Early signs of fetal hypoxaemia can be detected and, when due to causes such as oxytocin overdose or hypotension from epidural analgesia, can be treated. Where the hypoxaemia results from an irreversible cause such as "cord round the neck" or placental insufficiency delivery can be expedited to prevent severe sustained hypoxaemia. We believe that continuous monitoring results in a healthier neonate and may well explain the great improvement in neonatal mortality.
- (2) With an increasing number of terminations of pregnancy being performed many units have found that their premature delivery rate has increased, this being due to cervical incompetence caused by forcible dilatation of the cervix at the time of termination. It is our policy to examine the cervix at each visit of all patients whose previous pregnancy was terminated. When there is early dilatation or effacement of the cervix cervical circumsuture is inserted. If the pregnancy has progressed beyond 30 weeks the patient is recommended to have bed rest until 36 weeks. One of the most common conditions requiring antenatal admission to our unit is the risk of premature labour.
- (3) Our policy of amniocentesis in early pregnancy for genetic studies and  $\alpha$ -feto-protein studies when there is a history of previous fetal abnormality, or when there are predisposing factors such as maternal age, has resulted in the early diagnosis and termination of anencephalic monsters and fetuses with severe chromosome abnorm-

alities. Some of the reduction in stillbirths therefore is due to the fact that non-viable fetuses have been aborted rather than continuing into the third trimester of pregnancy.

(4) The high induction rate has not resulted in an increased number of premature babies or of operative deliveries. Indeed, the caesarean section rate for fetal distress has been reduced and this may well be because prolonged pregnancy is not tolerated. There is certainly no evidence that the high induction rate is detrimental but rather the reverse. The active management of labour with oxytocin has resulted in short labours and babies generally being born in a healthier state. Intrauterine infection from prolonged labour should be a disease of the past. We believe that to institute a policy of induction and active management of labour there are two essential prerequisites. When there is the slightest doubt regarding the period of gestation, induction should not be performed until ultrasound studies have confirmed the size of the fetus or, if there is still confusion, amniocentesis carried out and the liquor lecithin: sphingomyelin ratio determined. Secondly, no patient should receive oxytocin infusion without continuous fetal heart rate recordings.

We believe it would be of value if obstetric units throughout Britain published their perinatal mortality figures and their induction of labour rates so that we could obtain the facts rather than discuss possibilities. It is, of course, necessary to review the statistics in the light of the unit's policy regarding fetal monitoring and the use of ultrasound confirmation of dates.

—We are, etc.,

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