

6.6 per cent which compares exceedingly favourably with an overall 11 per cent rate for this hospital during the same year.

The point made by Hefni and Lewis about the advantages of unruptured membranes is further exemplified by the fact that in our series we had 25 failed inductions of which 15 subsequently achieved vaginal delivery.

As a result of one case of uterine hypertonus experienced in a multiparous patient with a very favourable cervix in our first series, it is now our practice to perform amniotomy alone on patients with a modified Bishop's score of 7 or more. With this form of management we have not experienced any further instances of uterine hypertonus. In this series of 497 cases, we have had no side effects from the intra-vaginal administration of PGE<sub>2</sub> and no complications. Our perinatal mortality in this series of consecutive inductions has been zero. This series is currently being prepared for publication.

Yours, etc,

D. T. LAURENCE and M. J. BENNETT

*Institute of Obstetrics and Gynaecology  
Queen Charlotte's Maternity Hospital  
Goldhawk Road  
London  
W6 0XG*

#### REFERENCE

Shepherd, J. H., Pearce, J. M. F., and Sims, C. D. (1979): Induction of labour using prostaglandin E<sub>2</sub> pessaries. *Br Med J*, **2**, 108-13.

**Epidural Analgesia and Placental Blood Flow During Labour in Pregnancies Complicated by Hypertension.** Jouppila, R., Jouppila, P., Hollman, A., and Koivula, A. (1979): *Br J Obstet Gynaecol*, **86**, 969-72.

From: A. F. L. Van Der Spek, J. N. Martin, Jr., and A. M. de Rosayro.

Sir,

In their study Jouppila *et al* (1979) report their findings of the first published attempt to quantify the intervillous blood flow in 'hypertensive' and 'severely pre-eclamptic' women in labour, before and after segmental epidural block. The method of Rekonen *et al* (1976), utilizing intravenously administered 133 Xenon, was employed in this investigation. It is concluded that segmental epidural analgesia is safe in hypertensive pregnancies as a group 'in the absence of any substantial change in systemic blood pressure'.

Aside from any discussion of the validity of the 133 Xenon technique to reveal accurately placental blood flow, we wonder whether appropriately rigorous patient selection criteria were utilized and whether enough patients were studied to permit analysis of this anaesthetic procedure. The classification of hypertensive diseases in pregnancy as utilized by Jouppila *et al* (1979) is no longer current and has been superseded by those of the American College of Obstetrics and Gynecology. From the information listed in the published paper, it appears that at least five of the studied patients fail to meet the criteria for hypertension by any standard, three are possibly borderline hypertensive only and not severely pre-eclamptic, yet another three are hypertensive and may be classified, at best, as only mildly pre-eclamptic. The authors make no mention of the presence or degree of proteinuria nor do they mention prior or concurrent antihypertensive therapy. We are not told whether any of the patients were multiparous or not; neither do we know the age of the patients. In our experience it is unusual to see such high birth weights of fetuses born to women suffering from severe hypertension or severe pre-eclampsia. Furthermore, the management of the important second stage is not mentioned; did any of the patients receive pelvic and perineal blockade by extending the segmental epidural block? If so, what were the effects on intervillous blood flow?

Since there is serious doubt as to whether the patients labelled as pre-eclamptic had the disease in its severe form, and because the patients with essential hypertension are few and not well characterized as to severity and associated maternal/fetal complications, we feel that acceptance of the validity, conclusions and recommendations of this study is inadvisable. The use of continuous segmental epidural for analgesia in parturients with pre-eclamptic or essential hypertension in its various forms will unfortunately continue to be controversial.

Yours, etc,

A. F. L. VAN DER SPEK

J. N. MARTIN JR

A. M. DE ROSAYRO

*The Departments of Anesthesiology and Obstetrics  
The University of Michigan Hospital  
An Arbor, Michigan  
ZIP 48109  
U.S.A.*

#### REFERENCE

Rekonen, A., Luotola, H., Pitkanen, M., Kuikka, J., and Pyorala, T. (1976): Measurement of intervillous and myometrial blood flow by an intravenous 133 Xenon method. *Br J Obstet Gynaecol*, **83**, 723-8.