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**Neonatal blood tests to exclude caesarean section as a cause of  
maternal-fetal transmission of hepatitis C**

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## Neonatal blood tests to exclude caesarean section as a cause of maternal-fetal transmission of hepatitis C

SIR—Maternal-fetal transmission of hepatitis C virus (HCV) is an emerging problem, with some investigators estimating that a 50% risk of intrauterine transmission when the mother is viraemic<sup>1</sup> and more if a chronic maternal infection is present.<sup>2</sup> In these cases, caesarean section would offer only limited protection against neonatal infection.

We report a 38-year-old woman (gravida 2, para 1) who had a caesarean section for cord shortness and marginal placenta previa during the 39th week of pregnancy. Polymerase chain reaction (PCR) blood test during pregnancy had revealed high concentrations of HCV. During the operation, a shallow cut was accidentally made on the scalp of the fetus. The parents were concerned that the neonate might have been infected with the virus during this procedure and threatened to take legal actions. The infant was tested and HCV genome was demonstrated by PCR in a blood sample drawn four days after birth. Because hepatitis C viraemia does not appear until several weeks after infection, even when the virus is transmitted during birth,<sup>3</sup> the results of this test clearly demonstrated that the child had been infected in utero and not by the cut inflicted during caesarean section.

This experience confirms the importance of early HCV PCR testing of neonates born of women with hepatitis C viraemia.<sup>4</sup> After this experience, the policy of our team is always to take early blood samples for HCV PCR from a baby born by a hepatitis C positive mother.

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- 2 Lynch Salamon DI, Combs CA. Hepatitis C in obstetrics and gynecology. *Obstet Gynecol* 1992; **79**: 621–29.
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- 4 Novati R, Thiers V, Monforte AD, et al. Mother-to-child transmission of hepatitis C virus detected by nested polymerase chain reaction. *J Infect Dis* 1992; **165**: 720–23.