

O'Donoghue K, Byrne, BM. Antenatal Detection of Abnormal Liver Function Tests—A Marker for Poor Perinatal Outcome. *Journal of Obstetrics & Gynaecology* 2000; 20:475-478.

Abstract: The purpose of this study was to examine (a) the incidence of liver disease diagnosed in our antenatal population, (b) the diagnostic value of initial symptoms and liver function tests (LFTs), (c) the adequacy of investigation and management of the liver disorder and (d) the obstetric and neonatal outcome in this group of patients. Women with abnormal LFTs that delivered at our hospital over a 2-year period were identified from computerised hospital records and data was obtained from chart review. Forty-six out of a total of 13 181 (0.35%) women had liver disease diagnosed in pregnancy: Diagnoses included intrahepatic cholestasis of pregnancy (13), pre-eclampsia and the HELLP syndrome (eight), acute fatty liver of pregnancy (three), hyperemesis gravidarum (one), hepatitis C (13), B (four) and hepatitis A (one), cholelithiasis (two) and hepatitis of unknown aetiology (one). Symptoms at presentation were more predictive of the final diagnosis than the initial LFT profile. Investigation of the liver disorder was incomplete in 50% of cases. One mother required intensive care for 6 weeks postpartum and three others had significant postpartum haemorrhage. There was one neonatal death and 24 neonates were admitted to the special care baby unit. Eighteen women attended for their postnatal check up at 6 weeks. Eight of these women were referred to a hepatologist. Detection of liver disease in pregnancy identifies a group at risk of poor neonatal and maternal outcome. Structured guidelines should be implemented in obstetric units to facilitate appropriate investigation, treatment and referral patterns for these women.

Concerns about accurately identifying high-risk pregnancies have resulted in stratification of severity of liver disease. Acute fatty liver of pregnancy and severe preeclampsia with HELLP syndrome are the most dangerous for both mother and fetus. This retrospective study of 13,181 women delivered during 1996 and 1997 at one hospital suggests that abnormalities in liver function tests, not the diagnosis, identify a group of women at risk for poor neonatal and maternal outcome.

I confess that I have been cavalier about the findings of modest abnormalities of hepatocellular enzymes (AST, ASP, GGT) and biliary enzymes (alkaline phosphatase) during an otherwise seemingly normal pregnancy. It has been easy to attribute such laboratory findings to the effects of normal pregnancy and to defer more extensive workup. As a consequence, prospective studies of these women have not been done. They should be!

Cytomegalovirus, EB virus, hepatitis viruses, cholestasis of pregnancy, and biliary tract disease have risks for pregnancy outcome and for the long-term health of the mother. I found it of interest that the effects of alcohol and drugs were not found during pregnancy even though there was a history of drug toxicity before pregnancy in a small number of patients.

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