

Acute fatty liver of pregnancy in the UK: A national study to describe disease incidence, prognostic factors, management and outcomes

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BACKGROUND: Acute fatty liver of pregnancy (AFLP) is a potentially lethal condition of late pregnancy which may be part of a spectrum of disorders related to pre-eclampsia. It has been identified by the UK Confidential Enquiry into Maternal Deaths as a leading cause of maternal mortality. Recent regional studies in the UK have reported widely varying incidence estimates. There has been no comprehensive national study of the epidemiology of this condition.

AIM: To determine the national incidence, prognostic factors, management and sequelae of AFLP in the UK.

METHODS: A national surveillance study was undertaken using the UK Obstetric Surveillance System (UKOSS) between February 2005 and August 2006.

RESULTS: 100% of UK consultant-led obstetric units contributed data to UKOSS. Using previously developed diagnostic criteria (1), there were 52 confirmed cases, representing an estimated incidence of 1 in 21,900 total births (95% confidence interval (CI) 1/17,200 to 1/30,100). 5 further reported cases did not meet the case definition. 63% of women were primigravid, 63% white, and 75% aged under 35. Nine women (17%) had twin pregnancies. 39 women (75%) were diagnosed antenatally (the majority on the day of delivery, range 0-4 days before delivery), and 13 postnatally (median 2 days following delivery, range 1-4). The median gestational age at diagnosis and delivery was 36 weeks (range 27-40). 60% of women were admitted to intensive care for a median of three days (range 1-8), and eight women (15%) were admitted to a liver unit (median stay 8.5 days, range 4-16). No women required a liver transplant. No women died (case fatality rate 0%, 95% CI 0-6.8%). 33% were reported to have additional severe morbidities; the most commonly reported were renal failure (8 women), HELLP syndrome (5), disseminated intravascular coagulopathy (4) and requirement for ventilation (4). There were six stillbirths and two neonatal deaths in a total of 61 infants (perinatal mortality rate 131 per 1000 births, 95% CI 58 to 242).

CONCLUSIONS: Acute fatty liver of pregnancy is rare in the UK, but there appears to be a better prognosis for women who suffer from the condition than previously reported (1,2). The outcome is poorer for infants.

1. Ch'ng CL, Morgan M, Hainsworth I, Kingham JG. Prospective study of liver dysfunction in pregnancy in Southwest Wales. *Gut* 2002; 51(6):876-80.
2. Confidential Enquiry into Maternal and Child Health. *Why women die 2000-2002*. London: RCOG, 2004.