Risks of miscarriage after amniocentesis

C. O. CARTER
From MRC Clinical Genetics Unit, Institute of Child Health, 30 Guilford Street, London WC1N 1EH

An encouraging summary report has been released by the U.S. Department of Health, Education and Welfare on the safety of amniocentesis and was presented at the American Academy of Pediatrics meeting in Washington in October 1975. The report was discussed by Dr Milunsky in 30 October issue of New England Journal of Medicine.

The collaborative study from 9 centres compared the outcome of pregnancy in 1040 women undergoing the procedure and in 992 controls. An attempt was made to match the controls for maternal age, parity, race, religion, socioeconomic status and other features. The most serious discrepancy in matching is that 53.4% of the amniocentesis group and only 34.9% of the controls were over the age of 35 years. The follow-up included neonatal and one-year examinations of the children who were the outcome of these pregnancies.

The most important finding was that fetal loss (spontaneous abortion and stillbirth) for the amniocentesis group was 3.5% (36 cases) and for the control group 3.2% (32 cases) a statistically insignificant difference. Further no significant difference was noted in the instance of congenital malformations, not detected by amniocentesis, neonatal illness, or development at 1 year of age. Data are not given on the incidence of Rhesus sensitization in the two groups. The overall accuracy of this screening procedure is said to be 99%. Nevertheless two negative misdiagnoses are reported, two infants born with Down's syndrome after they had been found to be normal on prenatal screening, and one positive misdiagnosis, galactosaemia in a child who at birth was found to be normal. Fetal sex was incorrectly assigned in three instances. The findings are to be published in full in a monograph from the National Institute of Child Health and Human Development.

It should be emphasized that these are the results of one, presumably selected, group of centres. In these centres, at least Dr Milunsky estimates, the risk of abortion as a result of amniocentesis is probably not more than 0.5%. The findings of the MRC trial have not been published yet, but are awaited with interest.