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DRUGS IN PREGNANCY

Since the thalidomide tragedy, there has been increased concern about the effects of drugs on the unborn child; testing of new drugs in pregnant experimental animals has been required in the United States since 1962. In one study, more than 90 per cent of 3,072 pregnant women took at least one drug and four per cent took 10 or more; the average number of different drugs taken during pregnancy was four

(C. H. Peckham and R. W. King, *Am. J. Obstet. Gynecol.*, 87:609, 1963). A more recent survey of 1,369 women found that 97 per cent took at least one drug during pregnancy (M. M. Nelson and J. O. Forfar, *Br. Med. J.*, 1:523, 1971).

CYTOTOXIC DRUGS - Most cytotoxic agents used in cancer chemotherapy and immunosuppression have teratogenic potential. Aminopterin given during the first trimester in 52 pregnancies was associated with 34 abortions; malformations were noted in 10 of 12 fetuses that were examined (H. O. Nicholson, *J. Obstet. Gynaecol. Br. Commonw.*, 75:307, 1968). Methotrexate administered during the first trimester has been reported to have caused malformations of the skull, face and extremities (A. Milunsky et al., *J. Pediatr.*, 72:790, 1968; H. R. Powell and H. Ekert, *Med. J. Aust.*, 2:1076, 1971). Mercaptopurine (Purinethol), azathioprine (Imuran), and cyclophosphamide (Cytosan) taken in the first trimester have been associated with a high incidence of abortion, but not with an increase in major malformations in the small number of pregnancies that ended in live births.

CENTRAL-NERVOUS-SYSTEM DEPRESSANTS - Barbiturates, opioids and other central-nervous-system depressants may cause neonatal respiratory depression when administered in high dosage during labor. Reserpine administered at term produces nasal congestion that can lead to serious respiratory obstruction in the newborn.

Narcotic abuse by a pregnant woman often produces withdrawal symptoms in the newborn infant; these can be lethal if they are not recognized and treated. Withdrawal symptoms appear to be especially prolonged in infants born to women taking methadone, as compared with heroin (B. K. Rajegowda et al., *J. Pediatr.*, 81: 532, September 1972). There is some evidence that LSD taken in early pregnancy may produce malformations in the fetus (S. R. Assemany et al., *Lancet*, 1:1290, 1970; J. L. Eller and J. M. Morton, *N. Engl. J. Med.*, 283:395, 1970).