

Ibuprofen in pregnancy could make babies infertile

Even if expectant mothers stop taking the painkiller the damage is likely to be irreversible, say scientists

By **Laura Donnelly** HEALTH EDITOR

TAKING ibuprofen during pregnancy could make a future daughter infertile, research suggests.

The study of human ovarian tissue is the first evidence that exposure to the common painkiller – taken by one in three women during pregnancy – could damage the fertility of future offspring.

Foetuses exposed to the drug saw a “dramatic loss” of the germ cells that form follicles, determining how many eggs a woman will be able to release in her lifetime, the research found.

Taking the tablets for just two days during pregnancy was enough to result in fertility problems in subsequent female children born, the French study shows. And even if women stopped taking the painkiller, the damage was irreversible, scientists warned.

The research was carried out on foetuses in the first trimester of pregnancy. But scientists said taking the anti-inflammatory drug during the first six months could reduce the store of eggs in the ovaries of future daughters.

Lead author Dr Séverine Mazaud-Guittot, at INSERM in Rennes, said: “Baby girls are born with a finite number of follicles in their ovaries and this defines their future reproductive capacity as adults

“A poorly stocked initial reserve will result in a shortened reproductive lifespan, early menopause or infertility – all events that occur decades later in life.

“We found that two to seven days of exposure to ibuprofen dramatically reduced the germ cell stockpile in human foetal ovaries during the first trimester of pregnancy and the ovaries did not recover fully from this damage.

“This suggests that prolonged exposure to ibuprofen during foetal life may lead to long-term effects on women’s fertility and raises concern about ibuprofen consumption by women during the first 24 weeks of pregnancy.” Scien-

tists said shorter courses of treatment, of less than two days, were less likely to result in damage to the ovarian reserve. It is estimated three in 10 women take ibuprofen during the first three months of pregnancy.

The NHS advises pregnant women to avoid the drug during the first six months, because it has been linked to an increased risk of miscarriage. If pain relief is required, paracetamol is advised, with the “lowest effective dose for the shortest time possible”.

Pregnant women are told not to take ibuprofen in late pregnancy, because of an increased risk of complications.

The study, which involved researchers from the universities of Edinburgh and Copenhagen, used samples from

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185 aborted human foetuses aged between seven to 12 weeks.

The research found that ibuprofen crossed the placental barrier, with the foetus exposed to the same concentration of the drug as the mother. Tissue exposed to the drug for a week had approximately half the number of ovarian germ cells.

Dr Mazaud-Guittot said: “We found there were fewer cells growing and dividing, more cells dying and a dramatic loss of germ cell numbers, regardless of the gestational age of the foetus.

“The implications of our findings are that, just as with any drug, ibuprofen use should be restricted to the shortest duration and at the lowest dose necessary to achieve pain or fever relief, especially during pregnancy.

Other experts said the findings were “concerning” but more research was needed to investigate the long-term consequences of ibuprofen intake.

Dr Dan Hawcutt, senior lecturer in Paediatric Clinical Pharmacology, University of Liverpool, said: “This report may concern mothers with daughters who have used ibuprofen early in pregnancy, but it is too soon to tell if this is a finding that will affect a child’s future fertility.”