

# Study links painkillers to reproductive disorders REUTERS

By Kate Kelland

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LONDON (Reuters) – Use of mild painkillers such as paracetamol, aspirin and ibuprofen during pregnancy may partly account for a sharp increase in male reproductive disorders in recent decades, according to a study published on Monday.

The research found that women who took a combination of more than one mild analgesic during pregnancy had an increased risk of giving birth to sons with undescended testicles.

This condition, called cryptorchidism, is known to be a risk factor for poor semen quality and a greater risk of testicular cancer. The study found that the risk of cryptorchidism was especially increased during the second trimester, the fourth to sixth months of pregnancy.

The researchers from Finland, Denmark and France, whose work was published in the *Human Reproduction* journal, said more studies were urgently needed and advice to pregnant women on use of painkillers should be reconsidered.

"Women may want to try to reduce their analgesic use during pregnancy," said Henrik Leffers of Copenhagen's Rigshospitalet, who led the research. "However, as biologists this is not something we can advise women about. So we recommend that pregnant women seek advice from their physician."

According to the Leffers team, more than half of pregnant women in Western countries report taking mild analgesics.

Doctors in most countries generally say women should avoid taking medicines while pregnant, but that paracetamol, ibuprofen and aspirin are considered safe in some conditions and at certain times.

Research in developed nations has shown that sperm counts have fallen by about 50 percent in the past half century.

This study looked at two groups of women, 834 in Denmark and 1,463 in Finland, who were questioned about their use of medication during pregnancy.

Their male babies were examined at birth for any signs of cryptorchidism, ranging from a mild form of the condition in which the testis is located high in the scrotum to the more severe form, in which the testis is high up in the abdomen.

The study was backed by work by scientists in Denmark and France who studied rats and found that

analgesics led to insufficient supplies of the male hormone testosterone during a crucial period of gestation when the male organs are forming.

These researchers said the effect of analgesics on rats was comparable with that caused by similar doses of known hormone, or endocrine, disrupters such as phthalates -- a family of chemical compounds used in the manufacture of plastics such as

PVC.

The results of the human study showed that women who used more than one painkiller simultaneously had a seven-fold increased risk of giving birth to sons with some form of cryptorchidism compared with women who took nothing.

The second trimester appeared to be a particularly sensitive time, with simultaneous use of more than one painkiller during this period linked to a 16-fold increase in risk.

"Although we should be cautious ... the use of mild analgesics constitutes by far the largest exposure to endocrine disruptors among pregnant women, and use of these compounds is at present the best suggestion for an exposure that can affect a large proportion of the human population," Leffers said.

Commenting on the findings, Allan Pacey of Britain's Sheffield University said they were "somewhat alarming."

"It is worth noting the researchers found a significant difference when women had used painkillers for two weeks or more and that the impact was greatest when taking them during their second trimester. Clearly further research is needed as a matter of priority," he said in an emailed comment.

(Editing by David Stamp)