

STUDY LINKS PARACETAMOL USE DURING PREGNANCY TO ADHD IN CHILDREN

Paracetamol is the most commonly used medication for pain and fever during pregnancy. But new research has revealed that it is associated with a higher risk for attention-deficit/hyperactivity disorder (ADHD) and hyperkinetic disorders (HKDs are a severe form of ADHD) in the children of mothers who used the drug when compared with children of mothers who did not use it.

A study published recently in the *Journal of the American Medical Association Pediatrics* has suggested that paracetamol has effects on sex and other hormones which can in turn affect neurodevelopment and cause behavioural dysfunction. The study's investigators noted that previous research has linked the drug to hormone disruption – a process that could impact on foetal brain development. With this in mind, the research team decided to assess whether paracetamol use during pregnancy could increase a child's risk of HDHD and HKDs – syndromes that emerge during early childhood.

The researchers studied 64,322 children and mothers in the Danish National Birth Cohort (1996-2002). More than half said they took paracetamol at least once during pregnancy. Parents reported behavioural problems on a questionnaire, and HKD diagnoses and ADHD medication prescriptions were collected from Danish registries. The risk of a child having ADHD and HKD-like behavioural problems increased when mothers used the drug in more than one trimester during pregnancy.



According to the Centers for Disease Control and Prevention (CDC), the percentage of children diagnosed with ADHD is increasing. In 2003 7.8% of children had the disorder, and this figure increased to 11% in 2011. The researchers say their findings suggest that because foetal exposure to paracetamol is frequent during pregnancy, this could explain the increasing prevalence of ADHD and other childhood behavioural disorders.

Their conclusion was that maternal paracetamol use during pregnancy is associated with higher risk for HKDs and ADHD-like behaviours in children. "Because the exposure and outcomes are frequent, these results are of public health relevance but further investigations are needed."

The results of the study also underline the importance of being very cautious when taking any drugs during pregnancy, rather than assuming they are safe.

The study was led by Zeyan Liew of the University of California, Los Angeles and was co-authored by Jorn Olsen of the University of Aarhus in Denmark.

Reference

<http://archpedi.jamanetwork.com/article.aspx?articleid=1833486>