JOINT OFFICIAL POSITION STATEMENT FROM THE UK TERATOLOGY INFORMATION SERVICE (UKTIS), MACDONALD OBSTETRIC MEDICINE SOCIETY (MOMS) AND THE BRITISH MATERNAL AND FETAL MEDICINE SOCIETY (BMFMS)

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Paracetamol in Pregnancy and Autism Spectrum Disorder

Summary: Paracetamol is commonly used by pregnant women and is generally the drug of choice for treating pain and fever during pregnancy. Numerous studies have investigated neurodevelopmental outcomes following *in utero* exposure to paracetamol, with highly inconsistent results. A 2025 review of the pivotal epidemiological evidence concluded that *in utero* paracetamol exposure is unlikely to confer a clinically important increased risk of autism spectrum disorder (ASD), and that the current evidence does not warrant changes to clinical guidelines on the treatment of fever and pain in pregnancy. It is important that maternal pain and fever are adequately managed during pregnancy and where required, paracetamol use should not be avoided.

Further details:

- **Effective management of pain and fever in pregnancy is crucial.**
    - Pain and fever during pregnancy can affect the woman's physical and mental health, as well as her ability to carry out normal activities of daily living. Uncontrolled pain and fever can also have adverse effects on the developing fetus, and may increase the risk of outcomes such as miscarriage, malformation, growth restriction and preterm delivery. Access to safe and effective treatment is important for all pregnant women to minimise these potential risks.
- **Paracetamol is the drug of choice for the treatment of pain and fever during pregnancy:**
    - Other treatment options carry higher risks to both the woman and fetus. Non-steroidal anti-inflammatory drugs (NSAIDs), should not be routinely used from 20 weeks gestational age due to adverse fetal effects and tend to be avoided where possible earlier in pregnancy. Opioid analgesics can cause neonatal withdrawal effects/respiratory depression and carry a significant misuse potential, while gabapentinoids (pregabalin, gabapentin) lack adequate safety data and are not suitable options for the treatment of mild pain.
- **Evidence on paracetamol use in pregnancy and autism spectrum disorder (ASD) risk is highly inconsistent:**
    - A 2025 review of the pivotal epidemiological evidence concluded that *in utero* paracetamol exposure is unlikely to confer a clinically important increased risk

of ASD, and that the evidence does not warrant changes to clinical guidelines on the treatment of fever and pain in pregnancy.
- Most studies reporting associations between *in utero* paracetamol exposure and ASD are impacted by important biases. Methodological weaknesses include selection bias and inconsistencies in adjustment for confounding factors (co-variable risk factors for ASD), particularly genetic and familial factors which strongly influence the likelihood of ASD. Studies which employ exposure discordant siblings as comparators to control for shared genetic and environmental risk factors which influence ASD outcome, demonstrate substantially weaker or no associations, thereby indicating that study findings are heavily influenced by residual confounding (see Ahlqvist et al. 2024 and Gustavson et al. 2021 for further information).

Conclusion: There is no good evidence that paracetamol causes ASD and potential harm may arise from avoidance of paracetamol for pain and fever. It is recommended that pregnant women seek advice from their healthcare professional if they have concerns relating to paracetamol use.

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