Phases of Risk for Brain Development

THE SCIENCE BEHIND BABY BRAINS



[REFERENCE GUIDE]

While most physicians are unfortunately not aware of all of the evidence we have about this connection

between acetaminophen and chemical injury to babies, WPLab, Inc. does not provide medical advice and does not recommend any particular method of treating fevers or pain in children. This resource is simply a free resource for parent education, and should not be used as a medical recommendation.



At what stage does acetaminophen cause neurodevelopmental problems?



AT BIRTH

For babies and children, definitely yes

When the umbilical cord is clamped, whatever is in the mother's blood is now also in the baby's blood, and the baby must process any remaining drug without the mother's help. Evidence indicates that the moment of birth and probably the few hours after birth are the most critical in terms of avoiding acetaminophen exposure.

DURING PREGNANCY

Seems Likely

While the evidence is not overwhelming, there is still a possible connection between what mothers take and what is passed along to the baby. Since the baby must process any drugs all by themselves after the umbilical cord is clamped, it is very important for the mother to consider her acetaminophen use when she goes into labor and delivery.

FIRST 10 DAYS

For babies and children, definitely yes

The first 10 days are critical for the health and neurodevelopment of your baby. During this time, they are extremely susceptible to oxidative stress, and very susceptible to bad reactions from being given



NURSING MOTHERS

No evidence

Breastfeeding is the way humans get their babies' immune systems and their bacteria up and running. Our bacteria and our immune system form a key, intertwined system. Breastfeeding results in much lower concentrations of acetaminophen in the baby than in the mother, and there's no scientific evidence of risk for the baby from acetaminophen exposure during breastfeeding.

For more information and additional resources, please visit <u>wplaboratory.org</u>

acetaminophen for pain or discomfort for procedures such as circumcision. Be aware of the risk and make a plan for what you will tell the doctors about your preferred care as part of your birthing plan.



FIRST 5 YEARS

For babies and children, definintely yes

As children's brains mature, they become less susceptible to the harmful effects of acetaminophen. The science shows that, from the age of 6 and on, the risk for developing autism from acetaminophen exposure has largely passed. Until then, it's important for parents to carefully consider acetaminophen exposure for their children.

More about WPLab Inc.

WPLab is a not-for-profit company that conducts research and education related to immune system dysfunction in high-income countries. A current focus is the interaction between the immune system and acetaminophen (paracetamol) early in life, and how that interaction affects brain development. We are currently conducting laboratory work, and, at the same time, work with social media and other venues to educate caregivers about what is known regarding the impact of acetaminophen (paracetamol) on the developing brain. For more information about WPLab, please see our website at <u>www.WPLaboratory.org</u>.

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