

# Lower IQ found in children of women who took epilepsy drug

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Children of women who took the epilepsy drug valproate during pregnancy appear to be at a greater risk for lower IQ, according to research presented at the American Academy of Neurology's 59th Annual Meeting in Boston, April 28 – May 5, 2007.

The study looked at IQ results for 187 two-year-old children of mothers who took the epilepsy drugs carbamazepine, lamotrigine, phenytoin, or valproate during pregnancy.

According to the study, 24 percent of the children of mothers who took valproate showed an IQ in the mental retardation range, compared to 12 percent for carbamazepine, nine percent for lamotrigine, and 12 percent for phenytoin. On an IQ test, children whose mothers took carbamazepine scored an average of 93 points, compared to 93 for those who took phenytoin, 96 for lamotrigine, and 84 for valproate. The scores were adjusted to account for the mother's IQ and the drug dosage.

The study also found that children with higher levels of valproate in their blood had lower IQ scores.

"Further studies are needed to confirm these findings, examine IQ at older ages, and to determine the risks for other epilepsy drugs," said study author Kimford Meador, MD, of the University of Florida in Gainesville, FL, and Fellow of the American Academy of Neurology. "However, our findings are consistent with other studies, which have shown valproate poses an increased risk for fetal death and birth defects, and have suggested the drug may harm cognitive development."

The study also found children's IQ was related to their mother's IQ for every epilepsy drug except valproate.

Meador is recommending doctors talk with their

patients about the risks associated with valproate.

"Although valproate remains an important treatment option in women who aren't able to use other epilepsy drugs, valproate should not be used as the drug of first choice for women of child bearing potential, and when used, its dosage should be limited if possible," said Meador.

Source: American Academy of Neurology

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