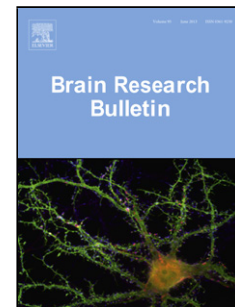


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Gender-dependent changes in physical development, BDNF content and GSH redox system in a model of acute neonatal hypoxia in rats

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Highlights:

- Acute neonatal hypoxia led to a gender-dependent upregulation of HIF1- α , GPx4 and BDNF mRNA expression level in the brain.
- Disturbance in the glutathione antioxidant system was revealed after acute neonatal hypoxia in blood and brain.
- Acute neonatal hypoxia induced a gender-dependent increase of BDNF protein level in the brain.
- A delay in physical and sensorimotor development of rat pups was observed in a gender-dependent manner.
- The model of acute neonatal hypoxia could be used as a milder model for hypoxic brain damage in extremely preterm infants.

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