

Preterm birth: Magnesium sulphate cuts cerebral palsy risk

January 21 2009

Magnesium sulphate protects very premature babies from cerebral palsy, a new study shows. The findings of this Cochrane Review could help reduce incidence of the disabling condition, which currently affects around one in every 500 newborn babies overall, but up to one-in-ten very premature babies (

The neuroprotective function of magnesium in preterm babies was first suggested in the early nineties. Cochrane Researchers who carried out a systematic review of the available evidence say this role is now established. Magnesium sulphate is usually given as a slow infusion through a vein, but can also be given as an injection into the muscle.

"There is now enough evidence to support giving magnesium sulphate to women at risk of very preterm birth as a protective agent against cerebral palsy for their baby," said lead researcher, Lex Doyle, who works at the Department of Obstetrics and Gynaecology at the Royal Women's Hospital and the University of Melbourne in Australia.

Exactly how magnesium protects the brain is not certain, but it is essential for many processes that keep cells working normally, it may protect against harmful molecules that can damage or kill cells, and it improves blood flow under some circumstances.

The researchers reviewed data from five trials of antenatal magnesium sulphate therapy, which together included 6,145 babies. Overall 63 women at risk of very preterm birth had to be given magnesium sulphate

to prevent one case of cerebral palsy in the baby.

Side effects of the treatment include flushing, sweating, nausea, vomiting, headaches and palpitations. However, the researchers found no increase in major complications in mothers due to magnesium therapy.

Source: Wiley

Citation: Preterm birth: Magnesium sulphate cuts cerebral palsy risk (2009, January 21) retrieved 5 April 2024 from <https://medicalxpress.com/news/2009-01-preterm-birth-magnesium-sulphate-cerebral.html>

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