

Safety of Early Discontinuation of Antiseizure Medication After Acute Symptomatic Neonatal Seizures.

Glass HC, et al . *JAMA neurol.* Published online may 24, 2021.

Background:

- Antiseizure medication (ASM) treatment duration for acute symptomatic neonatal seizures is variable.
- This study was conducted to assess whether ASM discontinuation after resolution of acute symptomatic neonatal seizures and before hospital discharge is associated with functional neurodevelopment or risk of epilepsy at age 24 months.

Methodology:

- Comparative effectiveness study
- A total of 303 neonates with acute symptomatic seizures from 9 US Neonatal Seizure Registry centers, born from July 2015 to March 2018 were enrolled
- Data were analyzed from June 2020 to February 2021.
- The primary exposure- Duration of ASM treatment dichotomized as ASM discontinued vs ASM maintained at the time of discharge
- Functional neurodevelopment - Warner Initial Developmental Evaluation of Adaptive and Functional Skills (WIDEA-FS) at 24 months.
- Post-neonatal epilepsy at 24 months follow up.

ACADEMIC P.E.A.R.L.S

Pediatric Evidence And Research Learning Snippet



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Results:

- 194 of 303 (64%) had ASM maintained at the time of hospital discharge, and among 109 (36%) neonates ASM were discontinued.
- Follow up details were available for 270 children evaluated at 24 months; the WIDEA-FS score was similar for the infants whose ASMs were discontinued compared with the infants with ASMs maintained at discharge (median score, 165 [IQR 150-175] vs 161 [IQR 129-174; $P = .09$).
- The epilepsy risk was similar (11% vs 14%; $P = 0.49$).

Conclusion:

- In this comparative effectiveness study, no difference was found in functional neurodevelopment or epilepsy at age 24 months among children whose ASM was discontinued vs maintained at hospital discharge after resolution of acute symptomatic neonatal seizures.
- These results support discontinuation of ASM prior to hospital discharge for most infants with acute symptomatic neonatal seizures.

EXPERT COMMENT

“Among neonates with acute symptomatic seizures during follow up neurodevelopmental outcome and risk for post neonatal epilepsy was similar in those with ASM discontinued vs continued at discharge. ASM can be discontinued safely at discharge in neonates with acute symptomatic seizures.”

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With warm regards,

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DHALIWAL**

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Reference

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