

Brief rhythmic discharges in neonates: a marker for seizures

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ABSTRACT – Brief rhythmic discharges (BRDs) are paroxysms of rhythmic electrographic activity with an amplitude of $>2 \mu\text{V}$ and a duration of <10 seconds. Although BRDs are reported in neonates, this electrographic activity contrasts the accepted definition of neonatal seizures (duration of >10 seconds). BRDs are associated with background EEG abnormalities as well as increased morbidity and mortality (Oliveira *et al.*, 2000, Nagarajan *et al.*, 2011), and appear to be more closely related to formal neonatal seizures than post-neonatal epilepsy (Nagarajan *et al.*, 2011). Most neonatal units are restricted to one-hour recordings, and if BRDs are observed without any accompanying electrographic seizures, then the neonate should be regarded as being at high risk of seizures and repeat recordings should be considered.

Key words: neonate, EEG, seizure, brief rhythmic discharges

References

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