# Midazolam in the Treatment of Neonatal Electroencephalography–Confirmed Seizures

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**Abstract** : Neonatal seizures are not a rare condition that require emergency measures or may otherwise result in a serous consequence. However, only continuous electroencephalography (EEG) recording allows for the reliable detection of neonatal seizures and make it possible to evaluate the burden neonates. Furthermore, conventional treatment with phenobarbital may fail and the neurological outcomes of the newborns may thus be accordingly threatened. Midazolam is a first–line drug in the treatment of status epileptics in children whereas a few studies have been conducted to evaluate the efficacy of midazolam for neonatal electroencephalography–confirmed seizures (ESz). To evaluate the efficacy of midazolam for ESz, we reviewed 11 cases of neonatal seizures and found two cases of ESz which had been treated with midazolam. These two cases had been treated phenobarbital before using midazolam whereas their seizures had not been controlled. The ESz in these cases stopped immediately after a single bolus injection of midazolam and the following continuous infusion of midazolam. The seizures never relapsed during their neonatal period. This study suggests that midazolam is effective and might thus be an alternative second–line drug in the treatment of neonatal status epileptics albeit further prospective studies with a larger number of ESz are called for to obtain further evidence regarding the efficacy and adverse effects.

**Key words : Midazolam, Neonatal seizures, Status epileptics, EEG–confirmed seizures**