

Massachusetts Neurologic Association

March 25, 2017

CALL FOR ABSTRACTS

Deadline for submission: March 10, 2017

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The Poster Presentation Session at the MNA Spring Meeting aspires to allow residents and fellows in training to present their research or interesting cases in a poster session. Please follow the following abstract guidelines:

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Title: Rescue Medications in Epilepsy Patients: A Family Perspective

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Abstract:

(There is a limit of **350** words for your abstract submission).

Rescue Medications in Epilepsy Patients: A Family Perspective

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Objectives: The aim of this study was to analyze pre-hospital seizure rescue medication (RM) use in a pediatric epilepsy population, caregiver knowledge and comfort, and prescription patterns.

Methods: Cross-sectional observational study based on a survey to families of pediatric patients with epilepsy and based on medical chart review.

Results: One hundred (92.6%) out of 114 families answered the survey. Fifty-five patients were females (55%), with a median (IQR) age of 11 (6-14) years. Eighty-nine (89%) patients had RM prescribed, and 37 (42.1%) used it in the past. In univariate analysis, patients were more likely to have a RM when they had a history of SE ($p < 0.001$), ≥ 3 anti-seizure medications (ASM) ($p = 0.016$), or seizures were ≥ 30 seconds ($p = 0.007$). However, patients were not more likely to be prescribed a RM if they were diagnosed at < 2 years of age, had a history of seizure clusters or uncontrolled epilepsy, or were currently not on ASMs. However, in multivariate analysis only a history of SE ($p = 0.01$) remained significant.

Out of 91 families, 68 (74.7%) prefer a non-rectal RM, this was higher for patients with normal development (89.8%; $p=0.004$), and not associated with age or sex. Fifty-seven (64%) families reported that they received RM training. Nine (10.1%) parents did not know the RM name, and 30 (33.7%) did not know the administration timing. Forty-five (45%) families had a seizure action plan (SAP), and this was a predictor for knowing the RM name (97.8% vs 81.1%; $p=0.02$), the administration timing (80% vs 52.3%; $p=0.007$), and school awareness of RM (62.7% vs 37.3%; $p<0.001$).

Significance: Most patients with epilepsy had a RM, but only 64% reported receiving training. Patients were more likely to have a RM if they had prior SE. Families with a SAP were more knowledgeable about the RM. Educational interventions may improve families' knowledge and use of RM in the pre-hospital setting.