

Seizure reduction in pediatric drug resistant epilepsy (child epileptologist versus non-epileptologist child neurologists). A retrospective study

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INTRODUCTION

Little is known about the differences in outcomes in pediatric patients diagnosed with drug-resistant epilepsy (DRE) according to whether they are followed by epileptologists or child neurologists not specialized in epilepsy.

OBJECTIVE

We analyzed the differences in seizure frequency between patients followed by a child epileptologist and child neurologists (not epileptologists).

MATERIALS AND METHODS

We conducted a retrospective study of pediatric patients with DRE following the ILAE (International League Against Epilepsy) definition in the Hospital Italiano de Buenos Aires. 85 participants were consecutively selected (between April 2019 and October 2023). All of them were previously followed by child neurologists (non-epileptologists) and were receiving at least two anti-seizure medications at the first consultation with the epileptologist. We analyzed with a paired T-test the difference between baseline and current monthly seizure frequency means (defined as the reported mean of total monthly seizure frequency at the time of the initial visit with the epileptologist and current mean monthly seizure frequency respectively).

RESULTS

Participants experienced a significant monthly seizure reduction [54,4 versus the baseline 102,8 (p=0,03)]. 60% presented a seizure reduction >50% versus the baseline (29% of them were seizure-free in the last 6 months). 21% did not show changes and 19% presented a worsening in seizure frequency

CONCLUSIONS

Our study suggests an association between improvement in seizure frequency and child epileptologist follow-up of DRE patients. Multicenter studies should be carried out to verify this data.

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Table 1 (Demographic and clinical characteristics of patients included in the study)

Male	47 (55%
Female	38 (45%)
Age of first seizure	1-12 years old (median = 1 year old)
Etiologies	unknown = 35 structural = 30 genetics =11 infectious = 6 immune = 3
Seizure burden	baseline = 0-900/month (mean = 102,8) current = 0-600/month (mean = 106,7)

Graphic 1:Current seizure frequency compared to baseline (percentage)

