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Electro-clinical spectrum of epilepsy as per ILAE 2022 diagnostic system in children up to 2 years of age

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Excluded(insufficient data)- 24



Hearing

impairment

Introduction

This study is based on ILAE classification 2022 syndromes children up to 2 years of age

Objectives

Primary

Proportion of epileptic syndromes in children 0-2 years with epilepsy.

Secondary

- Etiology
- Neuro-developmental comorbidities

Methods

- Hospital based sectional study
- Children up to 2 years diagnosed with epilepsy were enrolled
- **Epilepsy** syndrome diagnosis was done as per 2022 ILAE diagnostic scheme.

n - 166

- Mean age
- of onset 4 months
- Boys 119 (71.68%)
- Girls 47 (28.31%)

Self-limited epilepsies

Self – Limited Familial Neonatal-Infantile Epilepsy (SeLFNIE), n=1

Epilepsy Syndrome, n= 115 (69.69%)

- Self- Limited Neonatal epilepsy (SelNE), **n=1**
- Myoclonic epilepsy in infancy (MEI), n=1

Developmental and epileptic encephalopathies (DEE)

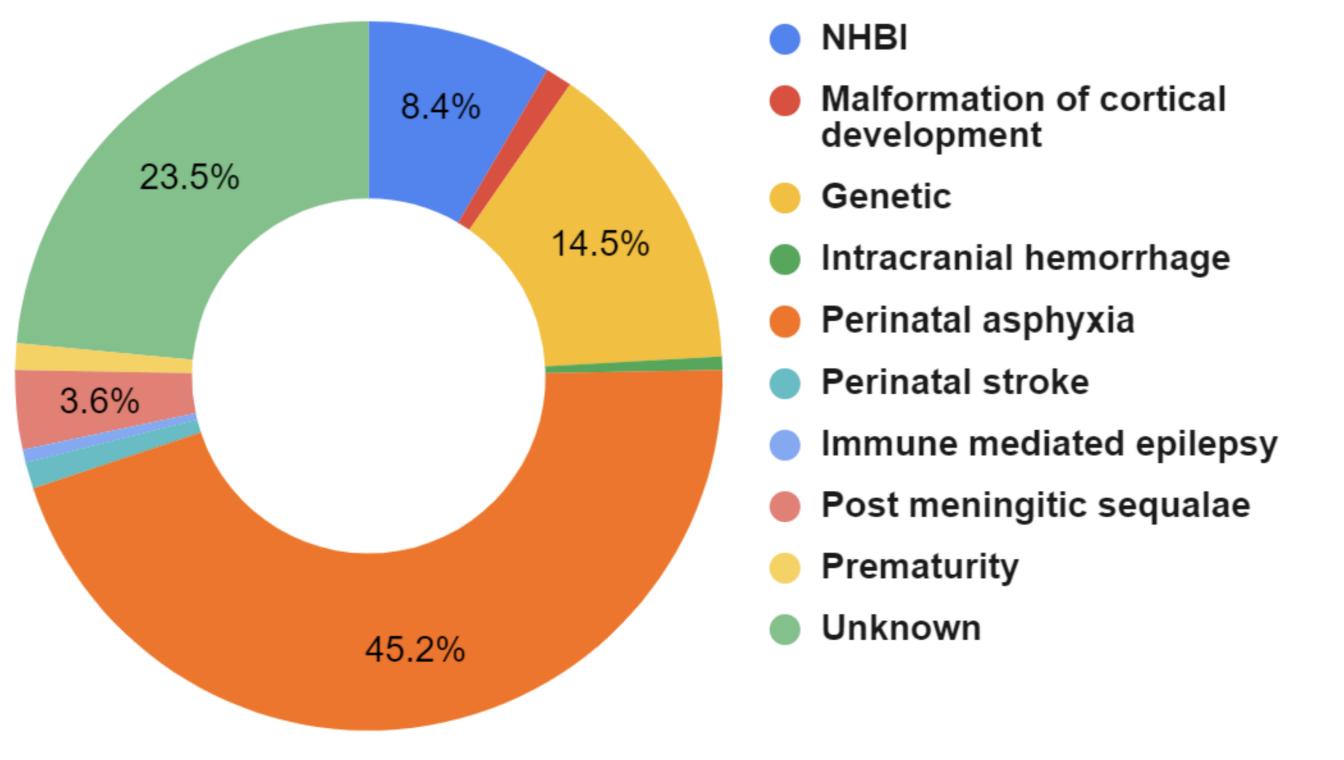
Results

Total Number of children enrolled- 190

Children included for classifying into epilepsy (n=166)

- Early infantile developmental and epileptic encephalopathy (EIDEE) , n=9
- Infantile epileptic spasm syndrome (IESS) , **n= 97**
- Dravet syndrome (DS), **n=1**

Etiology of epilepsy



Etiology-specific syndromes

Pyridoxine-dependent (ALDH7A1)-DEE (PD-DEE), **n=1**

Percentage

- PCHD19 clustering epilepsy, **n=1**
- Sturge Weber syndrome (GNAQ), n=1
- Biotinidase deficiency, **n=1**

IESS Etiology

•	Perinatal Asphyxia	- 53
•	NHBI	- 13
•	Postmeningitic sequalae	- 4
•	Prematurity	- 2
•	Perinatal Stroke	- 1
•	Genetic:	
•	TSC	-5
•	Aicardi Syndrome	- 1
•	UBA5+	-1
•	Downs syndrome	- 1

SelfNIE



Generalized

Developmental Cerebral Palsy Microcephaly

Tonic-clonic (n=26)

Comorbidities in children aged 0-2 years with epilepsy

Non- Epilepsy Syndrome, n= 51 (30.72%)

- Tonic (n=3)
- Atonic (n= 1)
- Myoclonic (n= 1)

Focal

Visual

impairment

- Tonic-clonic (n= 11)
 - Tonic (n=7)
- Clonic (n=2)

Conclusions

- Infantile epileptic spasm syndrome most common epilepsy syndrome
- Global developmental delay is the most common comorbidity.
- Perinatal Asphyxia is the most common etiology
- Neurodevelopmental co-morbidities such as global developmental delay and cerebral palsy were common, indicating the need for screening and multidisciplinary care

References

Zuberi SM, Wirrell E, Yozawitz E, Wilmshurst JM, Specchio N, Riney K et al. ILAE classification and definition of epilepsy syndromes with onset in neonates and infants: Position statement by the ILAE Task Force on Nosology and Definitions. Epilepsia. 2022;63:1349-97.