

# Recent trend of SSPE in children: A reemergence and younger age of presentation: A study from Bangladesh. Poster

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## Introduction

Subacute sclerosing panencephalitis (SSPE) is a rare but fatal disorder which occur as a delayed neurologic complication of measles. Patients usually present on average 5-10 years after clinical or subclinical infection of measles. The key clinical features are myoclonic jerk, neuroregression, encephalopathy etc. Death usually occurs within 1–3 years once the disease is established. In recent years, an upsurge of SSPE has been observed.

## Objective

This study was aimed to evaluate clinical findings, EEG profile and neuroimaging findings of patients of SSPE in a tertiary center

## Methodology

Study Design: Cross Sectional study  
Number of Patients: 40 patients  
Place: Department of Pediatric Neurology , Bangabandhu Sheikh Mujib Medical University.  
Study duration: July 2020 to July 2023  
Inclusion criteria: patients were diagnosed on the basis of clinical features, EEG findings, Neuroimaging and confirmed by CSF anti-measles antibody.

**Table 1: Baseline Characteristics of cases (n-40)**

	<3 year	3-4 year	>4 year	Total
Age of onset	13 (32.5%)	6 ( 15%)	21 ( 52.5%)	40 (mean age 6.5±2)
Male	9 (69%)	6 ( 100%)	15 (71.4%)	30 (75 )
Female	4 (31%)	0 (0%)	6 ( 28.4%)	10 ( 25)

**Table 2: Demographic status of cases (n-40)**

	<3 year (13)	3-4 (6)	>4 (21)	Total (40)	
Urban	3(23.07%)	2 (33.33%)	6 (28.57%)	11 (27.5%)	
Rural	10 (76.92%)	4 (66.66%)	15 (71.42%)	29 (72.5%)	
H/O measles	5 (38.46%)	2 (33.33%)	4 ( 19.04%)	11 ( 27.5%)	
H/O vaccination	9 (69.23%)	6 (100%)	18 (85.71%)	33 ( 82.5%)	
Not vaccinated	4 (30.07%)	0 (0%)	3 (14.28%)	7 ( 17.5%)	P 0.03

**Table 3: Key clinical features (n-40)**

	<3 year (13)	3-4 (6)	>4 (21)	Total (40)	
Myoclonic	9 (69.23)	6 (100)	19(90.47)	34 (85.00)	
Generalized tonic-clonic	2 (15.38)	0 (0)	2 (9.50)	4 (10.00)	
Focal Status	1 (7.69)	0 (0)	0 (0)	1(2.50)	
	1 (7.69)	0 (0)	0 (0)	1(2.50)	
Movement disorder	8 (61.53)	1 (16.66)	8 (38.09)	17 (42.50)	0.03
Ataxia	8 (61.53)	2 (33.33)	8 (38.09)	18 (45.00)	
Motor regression	12 (92.30)	3 (50)	13 (61.90)	28 (70.00)	
Speech regression	4 (30.76)	1(16.66)	4 (19.04)	9 (22.50)	
Behavioural disorder	3 (23.07)	0(0)	5 (23.80)	8 (20.00)	
Visual impairment	1 (7.69)	0(0)	3 (14.28)	4 (10.00)	

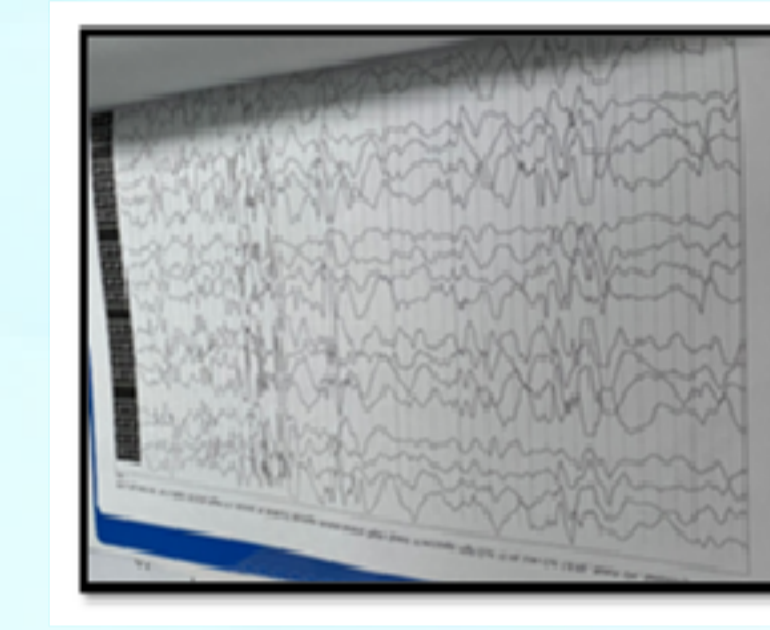
**Table 4: EEG findings of the studied case (n-40)**

	<3 year (13)	3-4 (6)	>4 (21)	Total (40)
Background abnormalities				
Normal	1 (7.69)	0 (0)	1 (4.76)	2 (5)
Generalized slowing	9 (69.23)	5 (83.33)	15 (71.4)	29 (72.50)
Localized slowing	3 (23.07)	1 (16.66)	5 (23.80)	9 (22.50)
Periodic burst	8 (61.5)	2 (33.33)	15 (71.42)	25 (62.5)
Burst suppression pattern	3 (23.07)	3 (50)	2 (9.5)	8 (20)
Slow wave with spikes	1 (7.69)	1 (16.66)	2 (9.5)	4 (10)
Others	1 (7.69)	0 (0)	2 (9.5)	3 (7.50)

**Table 5: MRI of brain of the studied subjects (n-40)**

	<3 year (13)	3-4 (6)	>4 (21)	Total (40)
Normal	4 (30.76)	1 (16.66)	9 (42.85)	14 (35)
Abnormal	9 (69.23)	5 (83.33)	12 (57.14)	26 (65)
Cortical atrophy	5 (38.46)	3 (50)	11 (52.38)	19 (47.50)
Cerebellar atrophy	0 (0)	0 (0)	7 (33.33)	7 (17.50)
White matter hyperintensity	1 (7.69)	1 (16.66)	3 (14.28)	5 (12.50)
Basal ganglia hyperintensity	1 (7.69)	1 (16.66)	3 (14.28)	5 (12.50)
Others	1 (7.69)	0 (16.66)	3 (14.28)	4 (10)

- 3.5 year old girl
- Presented with seizure and drop attacks.
- Hyperactivity
- Speech regression
- Serum and CSF antimeasles antibody positive.



- 3 year old boy
- Neuroregression and myoclonus
- Nonvaccinated
- H/O of measles at 7 month of age
- EEG : Periodic long interval burst
- MRI of brain: nonspecific
- Bedridden at 4.5 year.



- 2.5 year old girl
- Presented with recurrent seizure, mainly myoclonic , ataxia and speech regression
- H/O measles infection at 6 month of age
- Not vaccinated
- CSF antimeasles antibody positive
- She is now in stage 3 of disease



## Conclusion

About 32.5% cases of this study belonged to less than 3 year  
Younger children were unvaccinated significantly  
Movement disorder was present significantly more in younger age group  
Vaccination coverage should be optimized.