ADHD AND LEARNING DISABILITY IN CHILDREN WITH NOCTURNAL VERSUS DIURNAL SEIZURES

INTRODUCTION

- Attention deficits and learning problems are commonly encountered in children with epilepsy which can lead to academic underachievement in them.
- □ Higher prevalence of epileptiform activity is seen in children with epilepsy, especially in those with nocturnal seizures.
- This could be because of the disrupted cognitive processing due to epileptiform discharges occurring during sleep.
- □ There are only few studies on the effect of nocturnal seizures on attention and learning in children.
- □ There is a need to study the association between attention and learning and timing of seizures in children and the difference between nocturnal and diurnal seizures in this regard.

AIMS AND OBJECTIVES

Research Question-

□ Is there an association between nocturnal seizures and ADHD/SLD in children with epilepsy?

OBJECTIVES:

 To determine and compare the association between nocturnal /diurnal seizures with ADHD in children aged 5-12years with epilepsy.
 To determine and compare the association between nocturnal /diurnal seizures with SLD in

children aged 5-12years with epilepsy.

Nocturnal seizures exclusively or prec

Prospective and
 Inclusion Criteria
 Children aged 5 of Pediatric neurol
 Generalised or fe
 All consenting p

Exclusion criteria

Children with de deficits
Traumatic brain
Diagnosed psyc
Children on >2 a
Children with IQ
The following were clinical psychologi
IQ assessment usin
Nimhans battery of INCLEN diagnosti

Gender



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									SI	_D v/s SEIZURE	TYPES		
MATERIAL & METHODS	ADHD				6- Hype	eractiv	ve					SLE	
s- definition- ILAE, seizures occurring					impulsi	ive .					NO	SLD	
dominantly, more than 90% of sleep.					3- Inati	tentive	9	Seizures -	Diurnal	Count	7	13	
	NO		31	54.5	16- Cor	nbined	1			% within Seizures -	30.4%	56.5%	
alytical study.	NO		01	54.5	ADHD				Nocturnal	Count	14	8	
a			25	45.5	19/27 c	hildre	n			% within Seizures -	43.8%	25.0%	
5-12 years attending to the OP department	YES Total				with Ro	vith Rolandic		Total		Count	21	22	
logy, KIMS HEALTH			56	100.0	epilepsy had					% within Seizures -	37.5%	39.2%	
focal epilepsy			00	10010	ADHD					Pearson's Chisquare			
patients	ADHI			//S SEIZURE TYPES					– p value-				
					AD	HD		0.050					
9	Seimunes	Divers	al	Count	No	Yes	Total			CONCLUSIO	DNS		
evelopmental delay or neurological	Seizures -	Diurnai		% within	19	5	24) has a signi	ficant associ	ation w	vith no	
				Seizures -	78.3 %	21.7 %	100.0 %	(p valu	(p value < 0.005).				
injury		Nocti	urnal	Count	12	20	32						
chiatric disorders				% within Seizures -	37.5 %	62.5%	100.0 %	Prevale	☐ Prevalence of SLD in general population				
antiepileptic drugs for treatment.	Total			Count	31	25	56			/ • • • • •		11.001	
Q deficit.				% within	54.5	45.5	100.0	61.8%	in our study	y(including	learning	g diffic	
re administered in the children by the				Seizures -	%	%	%						
gist who was blinded to the study.				Pearson's	_			SLD w	vas more in	children with	1 Diurn	al seiz	
ng seguin form board,				– p value	3			to noct	urnal seizui	res. P value -	0.05(ju	ist sigi	
of testing for SLD				0.003									
tic tool for ADHD.	SLD		-		D		□ ADHD was predominantly seen in children						
RESULTS			Frequency		Percent		ıt	epileps	sy, similar to	o the previou	s studie	es	
Seizures	NO SLD		2		. 37.5				REI				
r	SLD(8-			29			39.2	1. Al-Ma of noct	lt, A.M., Abo F urnal epilepti	Iammar c seizur			
29 32	12yrs)				00.2		with it Neuros	surg 56 , 49 (20	psy. <i>Eg</i>				
	Learning						2. Systad	l S., Bjornvold	M., Sor		P		
	difficulty	(5-	18		23.		23.2	and la:		-			
	7vrs)	``			2012		Res. 20	19;62:153-16	8.		0		
	T-+-1							5. Aldeni Mil S.	Educational u	nderach	I	AZ	
	Total			56	5	-	100.0	a mode achiev	el to predict th ement. <i>J Chili</i>	e effects d Neuro		7	
IVIALES DIUKNAL NOCTUKNAL												Vana	











