

신경과 질환에 동반되는 수면무호흡증과 수면의 문제

Sleep Apnea and Sleep Disturbances in Neurological Disorders

홍 승 봉¹Seung Bong Hong¹**ABSTRACT**

Sleep disturbances are frequently associated with neurological disorders. Sleep disorders interfere with rehabilitation of patients with neurological disorders such as stroke and may increase the severity of their symptoms and recurrence rate of stroke. The treatment of sleep apnea syndrome is particularly important in managing patients with cerebral infarction of whom 50 - 80% have moderate to severe sleep apnea. Sleep apnea produces not only poor quality sleep but also excessive daytime sleepiness, fatigue and lack of energy. Sleep problems frequently found in patients with dementia are sleep - wake cycle abnormality, fragmentation of sleep, nocturnal insomnia, decreased slow wave sleep and REM sleep, and sleep disordered breathing. The management of sleep disturbances is very important for controlling symptoms such as nocturnal wandering and sundowning syndrome in patients with dementia. Parkinson's disease and epilepsy are other neurological disorders that may have sleep disturbances. **Sleep Medicine and Psychophysiology 2001 ; 7(2) : 79-83**

Key words: Neurological disorder · Sleep disorder · Sleep apnea · Stroke · Dementia · Parkinson's disease · Epilepsy.

서 론

(neurological disorders)

본 론

구조적 수면무호흡증(Obstructive sleep apnea syndrome)

1. 뇌혈관 질환과 수면장애(Cerebrovascular disorders and sleep disturbances)

(cerebral infarction)

가

2

가

가

upper airway pa-

가

tency

1

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70~80%가 (obstructive sleep apnea syndrome) 가

(1,2).

(hemodynamic disturbance)가

(transient ischemic attack)

(Apnea - Hypopnea Index = AHI) 22.7 5.3 31.9,

(3).

Aldrich (4) (supratentorial) (infratentorial)

67%가

가 . Giubilei (5) 18

REM(NREM) REM , REM/NREM 2 0.02 , 3

0.22 가 . 2 REM 6 가 . NREM - REM sleep cycle

NREM 32.2 ± 5.8 mmHg, 18.2 ± 2.1 mmHg , REM 38.8 ± 6.6 mmHg, 23.4 ± 2.2 mmHg , REM NREM

(6).

(vestibulocerebellar)

가 가 가

가

(periodic limb movement disorder), REM (REM sleep behavior disorder),

가

2. 치매와 수면장애(Dementia and sleep disturbances)

가 (Alzheimer's disease)

(wandering), 40% , 14% (sleep architecture)

, NREM 1 가 3~4 . REM choline acetyl - transferase

가

가 78%가 , 48%

(vascular dementia)

235

70%가 1 5

, 96%가

가

가

(7).

Table 1. Interictal and ictal discharges in Sleep-Wake cycle

Epilepsy syndrome : circadian seizure rhythm	Interictal discharge		Ictal discharge	
	NREM ^c	REM ^d	NREM	REM
PGE ^a : awakening epilepsies (idiopathic, hereditary)	Common	Rare	Rare	Rare
LR ^b epilepsies : sleep epilepsies (symptomatic, cryptogenic)	Common	Rare	Common	Rare
Symptomatic epilepsies (with extensive encephalopathy) : sleep and waking epilepsies	Common	Rare	Common	Rare

a : PGE : primary generalized epilepsy
 b : LR epilepsy : Localization-related epilepsy
 c : REM : rapid eye movement
 d : NREM : non-REM

4. 간질과 수면(Epilepsy and sleep)

수면 중 발생하는 간질 발작은 수면 단계에 따라 다르게 나타납니다. NREM 수면 중에는 주로 전두엽에서 발생하는 전두엽 발작이 관찰되며, REM 수면 중에는 주로 측두엽에서 발생하는 측두엽 발작이 관찰됩니다. 이러한 발작은 수면 단계와 밀접한 관련이 있으며, 수면 장애와도 연관되어 있습니다. (1).

가, K-complex가 REM 수면 중 3~4초 동안 관찰되며, 이는 수면의 안정성을 유지하는 데 중요한 역할을 합니다. (partial epilepsy) (generalized epilepsy)

(amygdala - hippocampus) (r = -0.75, p<0.01)(10 - 12). (parasomnia)

가 (mesioorbital frontal regions) (scalp EEG) 가 (13,14).

Janz 가 (15).

가, REM 수면 중에는 주로 측두엽에서 발생하는 측두엽 발작이 관찰됩니다. 이러한 발작은 수면 단계와 밀접한 관련이 있으며, 수면 장애와도 연관되어 있습니다. (clinical seizures) REM

결론

가

가 중심 단어 :

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