

The Association of Gélineau's Syndrome (Narcolepsy without Cataplexy) With Childhood Poliomyelitis: An Educational Mini-Review

Aamir Jalal Al-Mosawi*

Advisor in Pediatrics and Pediatric Psychiatry and expert trainer, The National Training and Development Center and Baghdad Medical City, Iraq.

Mini-Review

*Corresponding author

Aamir Jalal Al-Mosawi,
Advisor in Pediatrics and Pediatric
Psychiatry and expert trainer,
The National Training and
Development Center and
Baghdad Medical City,
Iraq;

E-mail: almosawiAJ@yahoo.com.

Article Information

Received: 07-09-2022;
Accepted: 19-09-2022;
Published: 30-09-2022.

Abstract

Background: Gélineau's syndrome (Primary narcolepsy without cataplexy) is a condition of unknown etiology characterized by excessive sleepiness during day time. It is classified as narcolepsy type-2 by the third edition of the International Classification of Sleep Disorders (ICSD-3), but it is classified as hypersomnolence disorder by the fifth edition of the Diagnostic and Statistical Manual [1,2]. Although Gélineau's syndrome was first described in 1880, the disorder has not been reported in Iraq, and the association with childhood poliomyelitis has not been mentioned before in the medical literature.

Patients and methods: A man who was born in 1965, and suffered from childhood poliomyelitis has been experiencing irresistible sleep during work time, almost every day for more than two years.

Results: A 57-year old man who didn't receive poliomyelitis vaccine during childhood and suffered from childhood poliomyelitis the left him with permanent deformity of the right foot has been experiencing irresistible daytime sleep despite having adequate sleep at night. He has been sleeping during work time, almost every day for more than two years. He was sleeping for 10 to 15 minutes, and was sometimes sleeping while some one was talking with him. However, he was easily awakened by noises. He was usually falling a sleep two or three times during work time daily.

He has not been experiencing cataplexy nor has displaying symptoms of depression, and has not been experiencing obvious cognitive nor neurological deterioration,

Conclusion: The first case of Gélineau's syndrome (Primary narcolepsy without cataplexy) in Iraq is described, and the novel association with childhood poliomyelitis is reported.

Keywords: Primary Narcolepsy; Gélineau's Syndrome; Childhood Poliomyelitis; Iraq; Educational Article.

Introduction

Gélineau's syndrome (Primary narcolepsy without cataplexy) is a condition of unknown etiology characterized by excessive sleepiness during day time. It is classified as narcolepsy type-2 by the third edition of the International Classification of Sleep Disorders (ICSD-3), but it is classified as hypersomnolence disorder by the fifth edition of the Diagnostic and Statistical Manual [1,2]. Although Gélineau's syndrome was first described in 1880, the disorder has not been reported in Iraq, and the association with childhood poliomyelitis has not been mentioned before in the medical literature.

Patients and methods

A man who was born in 1965, and suffered from childhood poliomyelitis has been experiencing irresistible sleep during work

time, almost every day for more than two years.

Results

A 57-year old man who didn't receive poliomyelitis vaccine during childhood and suffered from childhood poliomyelitis the left him with permanent equino-varus deformity of the right foot has been experiencing irresistible daytime sleep despite having adequate sleep at night. He has been sleeping during work time (Figure-1), almost every day for more than two years. He was sleeping for 10 to 15 minutes, and was sometimes sleeping while some one was talking with him (Figure-1A, 1B & 1C). However, he was easily awakened by noises. He was usually falling a sleep two or three times during work time daily.

He was employed after completing primary school at the Iraq Ministry of Health as a part of a support program for crippled

Citation: Al-Mosawi AJ. The Association of Gélineau's Syndrome (Narcolepsy without Cataplexy) With Childhood Poliomyelitis: An Educational Mini-Review. Medp Psychiatry Behav Sci. 2022; 1(1): mppbs-202209005.

individuals. However, later in life he received a certificate of secondary school and a bachelor in Arabic language after studying at night school and college. He developed hypertension before about one year which was controlled with valsartan 160 mg daily. He has not been experiencing cataplexy nor has displaying symptoms of depression, and has not been experiencing obvious cognitive nor neurological deterioration,



Figure-1A: The man slept during work time while some one was talking with him.



Figure-1B: The man was sleeping during work time.



Figure-1C: The man was sleeping during work time.

The patient was not aware of any relative who had a similar condition.

Discussion

Narcolepsy was first reported by Gélinau (Figure-2A) in 1880 and later by Westphal (Figure-2B) in 1887 [3,4].



Figure-2A: Jean Baptiste Edouard Gélinau (December 23, 1828–March 2, 1906), a French physician.



Figure-2B: Karl Friedrich Otto Westphal (1833–1890) (March 23, 1833–January 27, 1890), a German psychiatrist from Berlin.

Gélinau reported a 38-year male patient with very frequent episodes of sleep of two tears duration. His condition was also associated with falls which may suggest cataplexy. Gélinau called the condition "Narcolepsy". However, Gatlinau's patient may be was failing in maintaining posture during some sleep attacks, without having actual cataplexy [3].

Westphal presented two patients with narcolepsy at a Berlin Medical and Psychological Society meeting during the year 1877, thereafter, he published the two cases in the Archives of Psychiatry and Nervous Disorders. Westphal emphasized the association of

narcolepsy with attacks of loss of muscle tone without loss of consciousness; he did not name these attacks [4].

In 1902, Löwenfeld emphasized that narcolepsy described by Gélinau represents a new clinical entity [5].

In 1907, Bertram M H Rogers defined narcolepsy as a disorder of unknown causation that is not epilepsy in which an individual fall into a sleep of short time. Rogers reported an intelligent 30-year old female who started experiencing narcolepsy without cataplexy after a period of having daily occipital headaches. Rogers emphasized that a patient with narcolepsy sleeps suddenly in the midst of an ordinary occupation [6]. In 1916, Henneberg emphasized that narcolepsy, sleep attacks can be associated with from of muscle paralysis triggered by emotions "cataplexy"[7].

In 1926, WJ Adie reported the occurrence of narcolepsy in children for the first time. Adie described a 12-year old girl with narcolepsy who initially received the diagnosis of minor epilepsy. The girl was experiencing difficulty in standing, and sometimes she was falling down when she was laughing heartily, thus suggesting the association with cataplexy [8].

Poliomyelitis was eradicated from Iraq in 2000 [9], however, this patient acquired the disease during the 1960s, and left him with permanent deformity at the right feet. Central nervous system stimulants such as amphetamines have been used in the treatment of Gélinau's syndrome as early as the 1930s [10].

In 1973, Parkes and Fenton emphasized that amphetamines can abolish the symptoms of Gélinau's syndrome, but patients having narcolepsy and cataplexy require clomipramine because amphetamines have no effects on cataplexy [11]. The use of methylphenidate in Gélinau's syndrome has been reported as early as the 1950s [12], and been generally considered as the treatment of choice [13].

Conclusion

The first case of Gélinau's syndrome (Primary narcolepsy without narcolepsy) in Iraq is described, and the novel association with childhood poliomyelitis is reported.

Acknowledgements

The author would like to express his gratitude for the patient for willingly accepted publishing his photos.

Conflict of interest

None.

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