Surgery Impact in Geschwind-Waxman Syndrome

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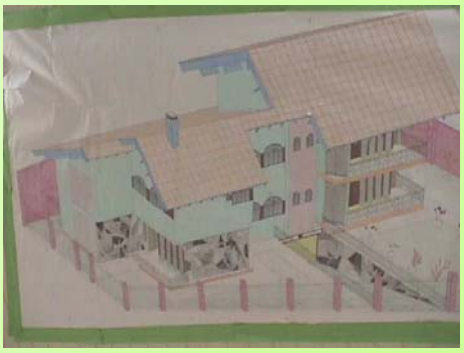
Backgrounds: Between 1974 and 1975, Waxman and Geschwind, in two distinct articles, had described clinical cases of nine unusual epileptic patients. Everyone showed the same tendency: they wrote extensively, in a meticulous way. Other traces shared included hiposexuality, with rare or none sexual impulse, irritability and hiperreligiousness. Although this was the first time a behavious syndrome was associated to an evident epileptic cause, the psychopathology related to epilepsy was knowed for a long time: Kraepelin, in 1906, noted how a patient "gave a long and meaningful description of his own condition". Naito briefly describe a 62-years old Japanese lady presenting seizures pos head trauma. The patient showed interictal overwriting, and her writings reported "pleasure experiences" minuciously and repetitively, with mystical and expressive unity. After this, other reports similar cases where found. Oliver Sacks tells the history of Franco Magnani, an artist whose complex partial seizures and eidethic visual memory were converted in gorgeous paintings produced by his intercomicial compulsive drawing. During his seizures, he heard and felt the odors of his small hometown back in Italy, witch he didn't visit for the past 30 years. At EEG, most patients presented irritative non-dominant temporal focus. Most probably, the extraordinary Russian writer Fyodor Mikhailovitch Dostoievski showed similar characteristics. The author of "The Brothers Karamazov" had complex mental states at the beginning of his epileptic seizures, and certain time commented about them: "*You, healthy people, can't imagine the happiness that we epileptics, fell during the second before our seizures [...] I don't know if this happiness lasts seconds, hours or months, but, believe me, I wouldn't exchange it for all the happiness life can bring you*."



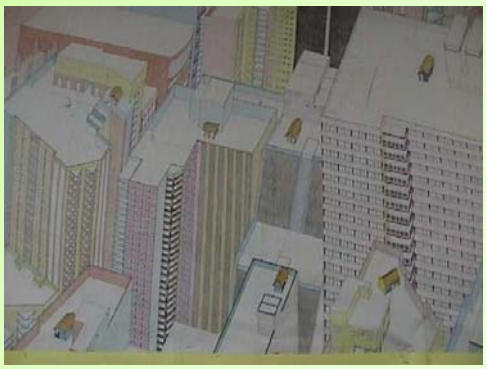
It is presented here the case of JCS, 41 years old, not completely alphabetized, whose hipergraphy peculiarity was the drawing of sophisticated civil constructions buildings in large amounts, and who also presented hiper-religiousness, hiposexuality and circumstanciality. Next is described the impact of epilepsy surgery in the symptoms previously showed by him.

Case Report: Mr. JCS suffered of partial epilepsy secondary to mesial temporal sclerosis. His seizures begun at 10 years old and its etiology was attributed to a very long febrile seizure in childhood. Due to medicine refractability, the possibility of surgery was suggested. Mr. JCS was totally aware of the risks of the procedure, specially about the possible effects on his literary skills. He decided, even though, to accept the surgical treatment, once he couldn't bare to live with the nightmare of frequent complex partial seizures, which caused him social damage. The patient produced, before the surgery, one plant per month, in average. After the intervention, carried through about three years ago, his seizures diminished significantly; however, his artistic production presented a fast decrease, and for the past two years it has been none. All other aspects of JCS personality remain unchanged.

Discussion: The neurophisiological mechanism of the Geschwind-Waxman syndrome is not completely elucidated. Activity disorders of the right hemisphere, particularly of the base medial cortical temporal areas, can liberate activity in the dominant hemisphere, leading to situations opposite from those which bring to afasia and disturbing the degree of language production in a pathologic way. The patient described is whorthy of special mention, once he is someone who presented, before surgery, a compulsion for a peculiar writing.

Curious is to notice that JCS was prohibited to attend school in childhood due to his epileptic seizures. Epilepsy, instead of incapacity and stagnation, brought him high creativity. After the surgery intervention, his seizures were found to be very well controlled, and is highly probable that this contributes for a better social acceptance of Mr. JCS. However, the loss of his artistic abilities was an impressive tribute, and so forth it should be something to be reflected about by everyone involved in similar situations.

The surgery interruption of the temporal hyperconnection is the most rational hypothesis to justify the loss of his singular abilities. People who suffer of Waxman-Geschwind syndrome secondary to mesial temporal sclerosis are potential candidates for surgical intervention nowadays. Therefore, all of them should be alerted in the most incisive and enlightening way about the possibility of loosing their literary skills. By the way, in these peculiar patients, this should be formally included among the surgery risks – the worst of them. The treatment's tribute should be less than the symptoms of any disease, doesn't matter what it is.



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