

A CASE OF SELF-INDUCED REFLEX EPILEPSY

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Abstract - The term reflex epilepsy is reserved for a small subgroup of seizures that occur regularly in response to specific stimuli. Our Patient is a 20-year old male, who had pleasure, euphoria, loss of consciousness and generalized tonic-clonic convulsion when he watched TV since ten years. During puberty the patient had self-induced reflex epilepsy with photic stimulation, when watching TV or looking at sun and with hand moving in front of his eyes to produce flickers. The patient first had sex pleasure, euphoria, erection and ejaculation, and then developed loss of consciousness and generalized tonic-clonic seizure, that took about 4-5 min. What is more interesting is that he asked us for a kind of drug that controlled his generalized tonic-clonic seizures but not his pleasure and orgasm, and he said that he would refuse any drug that interfered with his orgasm.

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INTRODUCTION

For a long time it has been known that seizures could be evoked in certain epileptic individuals by a discrete physiologic or psychologic stimulus. The term reflex epilepsy is reserved for a small subgroup of such seizures that occur regularly in response to specific stimuli (1,2).

Foster has classified the evocative stimuli into five types: 1- Visual; 2- auditory; 3- somatosensory; 4- writing or reading and 5-eating (1).

The first group has two major subgroups which are: A: seizures induced by flicker (3,5); B: visually evoked seizures not induced by flicker (4). The former is also classified to:

- a : pure photosensitive epilepsy (8);
- b: photosensitive epilepsy with spontaneous seizure (8);
- c: self - induced seizure (6,7).

As the attacks of our patient are all induced by photic stimulation, it is classified in the first group.

Seizure with self-induced flicker

This is a rare type of epilepsy that was first reported in mentally retarded patients; it is more frequent in female especially in childhood and adolescence. More new cases and information have been reported with advances in monitoring techniques. Although most of the patients are mentally retarded, but if they are

evaluated carefully, they comprise 40% of patients that have seizure induced by flicker. EEG shows generalized spikes or spike and slow wave complexes that are induced by stimuli in most of these patients (5). The seizure disorders in these patients are usually myoclonic especially palpebral myoclonus. The patients usually move their hands in front of the eyes or move the eyes up and down in order to produce flicker. EEG monitoring of them has shown that such acts may be part of their seizure. The patients enjoy these behaviours and frank sexual arousal has been described in these patients. Most of them have no attention to their problems and have no desire to use medication. Chlorpromazine and pimozide can suppress their pleasure, and can prevent their appeal to flicker. Sodium valproate is the drug of choice in treating convulsions in such patients.

Our patient not only had pleasure with self-induced photogenic seizure but also had erection and ejaculation in some instances.

Case Report

The patient is a 20-year old man who developed his problems at the age of six. He first stood in sunshine then moved his hands in front of eyes, afterward had pleasure and then developed generalized tonic-clonic convulsion with loss of consciousness that took 2-4 minutes; following seizures the patient had dizziness and headache for about one hour. He got used to do such work to feel pleasure several times a day. At the age of ten the patient had such problems while watching TV. He moved his head in front of TV and developed seizure, and it was so frequent that the family had to turn the TV off.

With puberty induced attacks were accompanied by orgasm and sometimes ejaculation. When the weather was cloudy the patient got angry and moved his hands in order to produce flicker but at cloudy days he did not become fully unconscious. The attacks have become more frequent since 3 years and the patient has been referred to many medical centres, but has not used medication at regular intervals and properly. He had no spontaneous seizure during hospital course.

On physical examination:

Vital signs: stable;

Systemic examination: Normal;

neurologic examination: MSE, speech and language were allright; cranial nerves, motor system, deep tendon reflexes, sensory and cerebellar systems were all OK.

Chest X-ray, routine lab. tests, brain CT-scan with

contrast and brain MRI with Gd "reported by neuroradiologist" were all normal.

EEG showed generalized paroxysmal sharp waves continuing more than 200 m.sec after photic stimulation.

SPECT was requested for the patient; unfortunately it was not done because radisotope was not available.

DISCUSSION

Reviewing medical literature and reports, we have found cases of induced seizures with psychologic and physiologic stimuli; as noted before they are found more in mentally retarded patients and absence or myoclonic seizures were predominant in them.

Our patient had normal IQ and he had sexual pleasure, erection, ejaculation and then generalized tonic clonic seizure with self induced flicker. Upon reviewing medline we noticed he is a rare one among reflex epilepsy cases. The interesting point was that the patient insisted on receiving medications that controlled his tonic clonic attacks but not his pleasure. For supressing pleasure we started pimozide and for controlling tonic - clonic seizures Sodium valproate was prescribed for the patient, and he had no seizure during his ten days hospital course. It is worth saying that reflex epilepsy is a rare and self induced reflex epilepsy is even more rare. We hope, that reporting this case offers more information about reflex epilepsy to our colleagues and are of the opinion that some patients

referred to psychologists with other diagnosis may have this kind of seizure.

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