TWO CLINICAL PRESENTATIONS OF COMPLEX PARTIAL SEIZURES

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Introduction

The close relationship between epilepsy and psychiatry is known from early times, such that the term "lunatic" was initially used for people suffering from epilepsy [1]. Among all type of epilepsies, complex partial seizures manifest psychopathology most often. Ounsted and Lindsey [2] reported that one-quarter of all children with complex partial seizures were subnormal. Of the rest followed over 30 years 30% showed psychiatric morbidity of which one-third was schizophrenic psychosis. Psychiatric phenomenon in complex partial seizures occur either as an ictal process or as interictal phenomenon. Representative cases of these two types who have presented to us over a period of eight months are reported.

Case-1

A 25-year-old naval officer was referred by his Ship's Commanding Officer with an administrative (AFMSF-10) report stating "Officer has tendency of opening the zip and fondling the genitals of a brother officer late night while the latter was fast asleep and also has a habit of making suggestive physical gestures". The officer gave history of waking up within an hour of going to bed and finding himself holding the genitals of a brother officer lying on the bunk above, onboard ship, the officer claimed he did not recollect waking up, reaching out and unzipping the other officer's trousers. When he noticed the other officer stirring, he ran away from the cabin. The incident repeated twice over a period of three months leading to a psychiatric referral. The officer denied homosexual interest and was engaged to a girl at the time of psychiatric referral. Relevant family history included generalized tonic clonic seizures in a stepbrother. General and systemic examination and psychiatric observation revealed no abnormality. Personality evaluation on Minnesota Multiphasic Personality Inventory (MMPI) showed normal masculinity femininity score. Electroencephalography (EEG) showed left temporal epileptic activity with generalization to other cortical areas. Plain and contrast computerized tomographic (CT) scan of head revealed no localized lesion. He was diagnosed as temporal lobe epilepsy-psychomotor automatism and placed on treatment with carbamazepine 500 mg per day in divided doses. He was followed up for 6 months without recurrence of similar demeanour.

Case-2

A 32-year-old soldier became suddenly violent while at his in-laws home on annual leave. He was allegedly trussed up in ropes over a period of seventy-two hours and was also branded on the scalp and the nape of the neck by a native healer. Continuous tight roping of upper arm led to paralysis of all movements of right elbow and below. The soldier was transferred to our hospital nearly three weeks after the violent episode. There was past history of brief episodic violence for which he was evaluated in detail 2-years earlier at another military hospital with detailed neurological and psychiatric examination including EEG and CT scan, all of which were normal. Clinical evaluation at our hospital revealed grade I muscle power in all groups effecting movements of right elbow, wrist and hand. General and systemic examination and psychiatric observation over next ten days revealed no abnormality. On the eleventh day soldier became severely and aimlessly violent. The episode lasted 15-30 minutes and soldier slept for 2-3 hours after being administered 5 mg Haloperidol intramuscularly. Soldier on waking up claimed lack of memory for the violent episode. Similar violence recurred next morning and lasted in varying degree for nearly 12 hours despite parenteral haloperidol 5 mg repeated at 4 hourly intervals. The soldier became less aggressive by the evening when detailed neurological evaluation revealed no fresh abnormality. Soldier remained withdrawn, preoccupied and reported hearing voices abusing him over the next seventy-two hours. EEG done 24 hours after the episode of violence was normal. He was provisionally diagnosed as acute unspecified psychosis and placed on oral antipsychotics and a course of six electroconvulsive shocks (ECS). Response to first ECS was dramatic with soldier becoming co-operative, socially interactive and lucid and rational in his thought processes. On recovery, soldier claimed partial memory of his abnormal behaviour. He denied becoming violent but remembered being restrained, examined by psychiatrist and neurophysician and being aloof and experiencing auditory hallucinations. On stabilization of psychiatric status an interictal EEG was done with overnight sleep deprivation which showed right parieto-temporal sharp waves generalizing to other areas of the cortex against a background of slow wave activity. Detailed psychometry revealed impairment in processing visual material, mild memory deficit, dyslexia, mild constructional apraxia and significant elevation of score suggestive of Right temporal lobe dysfunction (T score-72) on Luria Nebraska Neuropsychiatric Battery (LN_{NB}). He was finally diagnosed as (1) Complex partial seizures (2) Transient organic (Interictal) psychoses (3) Ischemic neuropathy of right medial, ulnar and radial nerves. Physiotherapy lead to improvement of muscle power of Right elbow and below to grade IV-V. He was placed on Carbamazepine 600 mg per day orally in two divided doses after

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withdrawing antipsychotics and retained in service under surveillance.

Discussion

Psychiatric phenomenon in epilepsy may be ictal due to electrical disturbance in the cortex or interictal due to kindling. Ictal phenomenon are not recalled and present as motor automatism, unconsciousness, intrusion of thoughts, thought block, memory distortions, affective symptoms, ecstasy, sexual excitement, visual illusions and hallucinations. Case 1 epitomizes automatism where muscle tone was maintained and person performed complex physical activity without being aware of what was happening. Mayanil et al [3] have reported the case of a young woman of complex partial seizures presenting with episodes of sexual excitement associated with autoerotic movements. Joseph [4] reported two cases of temporal lobe epilepsy who wrote complex textual material suddenly without voluntary control. Tan E et al [5] reported a case of temporal lobe epilepsy presenting with episodic whistling as an ictal symptom. Pontius [6] reported a rare case of homicide during a fugue state with echopraxia in temporal lobe epilepsy.

Inter ictal psychiatric disorder may occur in the form of psychosis, personality disorder, neurosis or sexual dysfunction. Spiers et al [7] have noticed homosexual, bisexual and fetishistic tendencies interictally and hence the need to follow up case 1. Case 2 has been atypical in that the patient manifested brief episodes of uncontrollable violence which he could not recall subsequently and prolonged episodes of odd behaviour like social withdrawal and hallucinations which were recalled subsequently. The brief violence forgotten is an ictal disturbance while the prolonged abnormal behaviour partially recalled is result of kindling, which normalized with ECS. Case 2 is unusual in that detailed neurological evaluation and investigation 2 years earlier and after the initial episode of

violence in our hospital revealed no abnormality. Persistence with a provoked sleep deprived EEG clinched the diagnosis nearly 6-weeks after hospitalization, highlighting the need for an awareness of the varied presentation. A high index of suspicion and easy access to EEG within the psychiatric department are expected to increase detection. Advances in diagnostic methods for epilepsy include telemetered 24-hour EEG monitoring to improve diagnostic yield and magnetoencephalography to improve ictal source localization [8]. We recommend EEG as a diagnostic aid for all psychiatric centres and telemetered EEG in larger Command Hospital psychiatric units.

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