

SCHIZOPHRENIA-LIKE PSYCHOSIS WITH CAPGRAS SYNDROME IN A PATIENT WITH RIGHT TEMPORAL LOBE EPILEPSY — A CASE REPORT

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SYNOPSIS

A 52 year old Chinese man with a 35-years history of epilepsy, presented with classical Schneiderian first rank symptoms of schizophrenia and delusion of Capgras. EEG showed a right temporal epileptogenic focus. The clinical, neuro-psychiatric and psychopathological features are discussed.

INTRODUCTION

The schizophrenia-like psychosis of epilepsy was first regarded as symptomatic schizophrenia by Gruhle (1936). The link between psychosis and temporal lobe epilepsy was first suggested by Gibb (1951) and further emphasised by both Hill (1953) and Pond (1957) (1). Slater and Beard's (1963) confirmed that there was a greater than chance association between epilepsy and a paranoid schizophrenic state. (2) Flor-Henry (1969) suggested that in

He had one generalised seizures in the ward after which he was put on carbamazepine. Since then he had no fits and the blood level for carbamazepine was satisfactory. EEG was done before he was discharged. It showed a right temporal epileptogenic focus. After about one month, his symptoms subsided considerably and he was discharged. Since then, he has again defaulted follow up.

DISCUSSION

The interictal psychosis in epilepsy may not be the same disorder as schizophrenia. However, it is usually referred to as schizophrenia-like because it is phenomenologically more similar to, than different from, schizophrenia (4). This is the presentation of the patient. The majority of his symptoms met the criteria for the diagnosis of nuclear schizophrenia on the basis of Schneider's first rank symptoms. However, his affect was well preserved and there was no catatonic features (1, 4). In addition, he has no family history of psychosis and he has a long history of temporal lobe epilepsy which has been shown in many studies to be associated with schizophrenia-like psychosis.

This patient has a predominance of paranoid symptoms. It is consistent with the findings of many authors that temporal lobes are somehow involved in the genesis of paranoid symptoms (7).

The link between psychosis and temporal lobe epilepsy was first suggested by Gibb and further emphasised by Hill and Pond. Subsequently Slater, Fior-Henry, Gregoriades, Taylor, Hara, Sherwin, Toone, Trimble and Perez, all have confirmed this association with special emphasis in the laterality of the epileptogenic focus in temporal lobe epilepsy (8). Retrospective analysis of all cases of schizophrenia-like psychosis in TLE by Perez and Trimble showed that 62% of patient had a left sided lesion, 23% had bilateral foci and only 15% were right sided (5). In other words, patients with a left sided focus are at a greater risk to develop schizophrenia-like psychosis and those patients with right sided lesions are not exempted. Sherwin pointed out that the prevalence of psychosis was related to poorly controlled temporal lobe epilepsy and estimated it to be approximately 10-15% (9).

In the local literature, there are only two cases of right temporal lobe epilepsy with schizophrenia-like psychosis reported by Kua and Lim (10). However, these two cases do not have the florid symptoms of nuclear schizophrenia as described in this patient who in addition had features of Capgras delusion.

The syndrome of Capgras was first described in 1923 by Capgras and Reboul (6). The descriptive term used was *l'illusion des sosies*, i.e. the illusion of double. *Sosie*, is a French word meaning double or an exact image of another. This term was subsequently adopted by other psychiatrists until 1929 when Levy-Valens called it "The Syndrome of Capgras".

The word "illusion" is a misnomer. Capgras Syndrome is not an illusion, a perceptive defects, a hallucination, a misrecognition, a memory deficit, disorientation or an autoscopic phenomenon (11). It is a delusional belief that people in his life had been replaced by identical doubles who are therefore imposters. This is the presentation of this patient. He believed that his wife was substituted by an exact double.

The occurrence of the Capgras phenomenon is rare.

So far there is only one reported case in Singapore psychiatric literature by Tan C T (12). Cases may be under reported but it is still rare.

Robert J Berson presented a review of 133 cases of Capgras Syndrome reported in the English Language Literature (11). This Syndrome appears in both men and women over a wide age range and in a variety of illness states. The most common diagnosis was that of schizophrenia, particularly the paranoid type. It is worth noting that irrespective of diagnosis the clinical picture of almost all patients was dominated by a marked paranoid component. This is clearly illustrated in this patient.

Capgras delusion can occur at any time during the course of psychosis. The persons accused of being doubles were people close to the patient. In this case, patient's wife is the double (6).

The possible role of organic disease of the brain in producing a state of mind favourable to the development of the Capgras delusion has been much discussed during the last decade. This syndrome has been observed in a number of organic psychosis including systemic illness and focal Central Nervous System disorder (13). It was found that focal Central Nervous System disorder producing Capgras Syndrome have more often involved the right than the left hemisphere (Jeffrey L Cummings). Alexander considered the combination of bilateral frontal and right temporal lobe lesions to be aetiologically significant. Hayman, Abrams and Quinn also suggested that right hemisphere dysfunction was of primary importance in producing Capgras Syndrome. The strong organic background in this patient as illustrated by the abnormal EEG and long history of epilepsy is of obvious significance though a single case report cannot be used to draw any firm conclusion. As far as we are aware, this is the first reported case of Capgras phenomenon associated with right temporal lobe epilepsy in the English Language Literature.

Regardless of the underlying aetiology, the delusion of doubles in its psychodynamic aspect is the solution to the problem of ambivalence (6). "The double" i.e. the bad object, can be met and confronted. The patient reveals his real hate and aggressive feeling towards it, without experiencing the guilt which would arise if such feelings were directed towards a loved and respected object. This is well illustrated in this case when the patient's wife "left" him because of his disturbing behaviour. This led him to feel ambivalent toward his wife and the Capgras phenomenon was produced.

There is no specific treatment for Capgras Syndrome. Any accompanying psychiatric symptoms must be treated. But the progress of the delusion of doubles does not necessarily follow the course of the associated psychosis. On some occasions, the psychosis will clear as the result of treatment but the delusion of doubles persists. At other times, the delusions may clear whereas the psychosis may persist and even get worse. In this case, the phenomenon disappeared before other psychotic features improved. The same phenomenon was not present during his second admission.

It is interesting to note that the interval between the age of onset of epilepsy and schizophrenia-like psychosis in this case was 35 years. This interval is much longer than any other findings in other studies i.e. 12-22 years in Toone's review (8). It raises the question whether the psychosis in this case was related to the epilepsy.

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