

*Case report***MAINTENANCE ELECTRO CONVULSIVE THERAPY FOR RECURRENT CATATONIA – A CASE REPORT**Nair V Indu^{1*}, G Pavan Kumar²¹Consultant Psychiatrist, Mental Health Centre, Thiruvananthapuram²DNB Resident, Mental Health Centre, ThiruvananthapuramCorresponding address: Mental Health Centre, Thiruvananthapuram. indunairv2008@gmail.com

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ABSTRACT

Catatonia was first described by Kahlbaum as a disorder of movement and speech. Kraepelin grouped catatonia along with other sub types of schizophrenia. In ICD-10 catatonia is mentioned as sub type of schizophrenia. DSM-5 gives independent status to catatonia. Catatonia may be caused by many medical conditions, but in psychiatry it is associated more with mood disorders and schizophrenia. There are certain conditions with recurrent catatonia like the periodic catatonia. We present the case of a 35 years old south Indian woman who has recurrent catatonia for the past 15 years. She was diagnosed with catatonic schizophrenia initially, treated with adequate trials of different antipsychotics, mood stabilisers and benzodiazepines with poor response. For the past 6 years she is being given maintenance ECT to which she is showing good response. Electroconvulsive therapy is effective in the treatment of recurrent catatonia and can be maintained. But there are issues like increased tolerance to ECT in due course.

Keywords – recurrent catatonia, schizophrenia, maintenance ECT, good response**INTRODUCTION**

Catatonia is a syndrome characterised by a constellation of affective, behavioural and motor symptoms. Clinical features include posturing, waxy flexibility, mutism, negativism, echopraxia, echolalia, stereotypy and peculiarities of voluntary movement.^{1,2} Some patients have a hyperkinetic form with purposeless excitement. While catatonia was traditionally considered a variant of

schizophrenia, the modern view is that its differential diagnosis is broad, representing a final common pathway of several psychiatric, neurological and medical disorders.² Periodic catatonia is a rare and misdiagnosed type of catatonia syndrome in which catatonic phases repeat regularly. Periodic catatonia is characterised by qualitative hyperkinetic and akinetic psychomotor disturbances through psychotic episodes. It has an acute onset, shows

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a bipolar and polymorphous symptomatology and runs a chronic course.³ It has been variably described as a rare heritable sub type of catatonic schizophrenia with a deteriorating course and characterised by specific gene mutation and autosomal dominant inheritance.⁴ Gjessing studied metabolic disturbances in these patients, and he said these behavioural fluctuations were related to cyclic nitrogen imbalance and thyroid dysfunction⁵, which has only historical importance now. The evidence base for the treatment of periodic catatonia is limited to case reports. Medium to high dose oral or parenteral benzodiazepines, specifically lorazepam, is considered first line treatment regardless of aetiology with 80-90% response.^{2,6} This response may be definitive or short-lived. If symptoms do not respond substantially or persistently to benzodiazepines, electro convulsive therapy is the most effective treatment.^{2,6} Atypical antipsychotics are sometimes effective for catatonia.⁷ Reports also suggest the use of NMDA antagonists (amantadine, memantine) and some older case reports explain the efficacy of lithium in periodic catatonia.⁵

CASE REPORT

35-year-old unmarried woman, the only child born late to parents, hailing from South India reported to a tertiary care centre in Kerala, with features suggestive of recurrent catatonia for the past 15 years. Her childhood history was uneventful except for three febrile seizures between three and five years. The onset of behaviour problems was around 14 years of age, insidious, with fearfulness, clinging behaviour, sudden agitation followed days later by motionless staring, posturing, mutism, rigidity etc. Initial evaluations were done at her native place, the details of which were not available.

In her first admission in 2003, she was brought with reduced food intake (mainly holding food inside the mouth for long hours), poor self-care, posturing, mutism etc. There was no fever, loss of consciousness, seizures, incontinence or other features suggestive of neurological conditions. On examination, she had increased rigidity, waxy flexibility, active and passive negativism and echopraxia. She was investigated in detail for medical causes like Wilson's disease, thyroid dysfunction, porphyria. Detailed neurological evaluation to rule out encephalopathy was done at Sree Chithira Thirunal Institute of Medical Sciences and Technology, Trivandrum. Metabolic profile, slit lamp examination, EEG and neuroimaging were normal. Hence, a diagnosis of catatonic Schizophrenia was made based on ICD-10. She was given olanzapine initially to which she had poor response. She was given ECT and following four sessions she improved remarkably and was discharged.

Over the next few years she came with recurrence of catatonic symptoms, mostly the hypokinetic type, once or twice a year. Once or twice she showed purposeless excitement during her catatonia recurrences. She was treated with antipsychotics like clozapine(100-400mg), amisulpride(100mg), risperidone(6mg) at different periods with partial response. Lithium(600mg) was tried for a period in 2008 with partial response. A trial of memantine(10mg) was given in 2013. But it was always the benzodiazepines, lorazepam(6-8mg) in injectable and later oral form which improved her catatonia.

From 2013 onward she was coming with recurrence of catatonia at least 3-4 times a year. Regular maintenance ECT was started from November 2013 onward initially at 1.2sec, 80Hz, PW-1, 33J and 45sec seizure duration, bilateral ECT twice weekly (2-4 sessions). She was given maintenance ECT once in 2-3 months initially and now is being given ECT once in 11/2 -2

months, now at 4.7sec, 90Hz, 179J, 35 sec seizure duration (4-5 sessions), following the ECT protocol including informed consent from relative often as patient was not in a position to give consent. She presents with recurrent catatonic symptoms measuring 30–42 on Bush Francis Catatonia rating scale⁸ and following ECT comes down to 10-15. In the ECT free period she is on Clozapine 100-200mg, Lorazepam 2-4mg, Memantine 10mg and multivitamins. In the catatonia free intervals, she attends to her self-care, does small household chores like cleaning her room. Her compliance to medications was good. She has no persistent memory deficits. But an increasing seizure threshold is the main concern now.

DISCUSSION

Catatonia and its causes have always been an enigma, with such recurrent catatonia syndromes especially so. The management of such conditions have only anecdotal evidence, no major studies. The use of maintenance ECT has not been seen in literature, though many medications are being tried, like mentioned earlier.

In our patient, the issues of frequent catatonia recurrences, increasing seizure threshold, more doses of maintenance ECT, long term side effects of ECT etc. are problems we anticipate in the future.

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