

Case Report

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A Case Report: The Treatment-Resistant of Schizophrenia Shows the Granulocytopenia, Became to be prescribed the Clozapine because of Stabilization of Cite Number after Administration of Non-Convulsive Electric Shock Therapy.

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Abstract

In a former report, we observed the possibility that the non-convulsive electric shock administration may contribute the stability of granulocytes number of the patients receiving clozapine [1]. The instability and most critical drug side-effect [2]. We have an idea about the drug accumulated experiences of combined therapy. Moreover investigated the transitions of granulocytes number in each case. As per observations the gradual stabilization of granulocytes number has been becoming apparent on the current of therapy. In this report describes the passage of stabilization, the patient's shows the granulocytopenia before dosing of clozapine.

Keywords : Clozapine therapy; Electric shock; Schizophrenia; Granulocytes

Introduction

For the treatment-resistant schizophrenic patients, the clozapine seems the last choice instead of its side effects. The agranulocytosis or the granulocytopenia is the most cumbersome obstacle for the continuation of clozapine dosing [2]. By former report, we had already presented the non-convulsive electric shocks (modified ECT: M-ECT) which were administered to the patient showing granulocytopenia during the dosing of clozapine recovered the number of granulocytes [1]. Now we continue to experience the effect of M-ECT on the number of cite by administering it on the patients who show granulocytopenia under the therapy of clozapine as well as those dropping out from candidates for clozapine dosing because of the lower number of cite than criterion for the dosing in spite of severe symptoms resistant against many kinds of drugs.

In this report, we show the process of stabilizations that occurred on the patient with granulocytopenia clearer under the criterion. We started the administration of M-ECT as an initial treatment and observed the transition of cite number. Consequently the number of granulocytes became upper the criterion. Then we could start the dosing of clozapine.

Case: 59 years old female schizophrenia

She has been suffering from instinct delusion that someone poisoning her, continuous hallucination, behavioral difficulties caused by her obsessive thinking and the difficulties maintaining human relationships.

The duration disease in for more than 25 years. Her personality seemed to break down gradually. Moreover, recently hard refusing against nutrition and drug ingestion appeared. Her number of granulocytes before given M-ECTs show below 4000/ml. After the M-ECT was started, her granulocytes number gradually stabilized. Then we introduced the simultaneous dosing of clozapine with M-ECT (Fig 1). Now, it passed about one month and a half after the clozapine administration was started and she is administered 100 mg clozapine a day and receive the M-ECT once a week. Her refusal attitude gradually weaker. The passing score decreased from 167 to 145. That is not attractive but in the almost all issues the point decreased or stayed at the same point, moreover any symptoms not deteriorate.

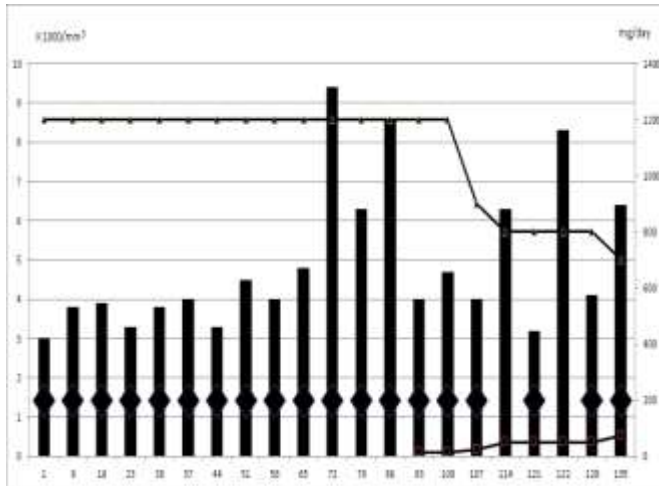


Figure 1: Case 1

The vertical column shows the number of granulocytes with the amount presented on the left vertical line. The polygonal line in a horizontal direction shows the dose of clozapine, with the amount presented on the right vertical line. Another line shows the total amount of other antipsychotic drugs given except for clozapine in a relationship with the dose of chlorpromazine. Each m-ECT session is also plotted. Days after the start of drug administration are indicated on the bottom horizontal line.

Conclusion

This case seems to indicate the possibility that the treatment-resistant of schizophrenic patients whose number of granular granulocytes are not enough for the criteria level could become allowed to prescribe the clozapine. We always have to treat those patients who's the number of cite is low under the criteria levels or slightly over that. Almost those are female patients with relatively small and slender body. The experience of this case might be a suggestion for the narrow path to the clozapine treatment for the patients dropping out the therapy because of the wall of the criteria. For the confirmation of the path, the carefully and persistent trial and observation are necessary.

Discussion

This case is the first one that the clozapine treatment was prescribed after M-ECT were administered. The M-ECT only could slightly weaken the refusal attitude of the patient. However, the effect was predicted not to lasting for a long time. The cite number became the safety rage under the observation. Then we started the administration of clozapine to make the recovery certain. Although our intention has not realized yet, the possibility that the severe ill schizophrenic patients with the low number of granulocytes could be prescribed clozapine after stabilization of cite number by M-ECT therapy. Although there is already the report that suggested the ECT increase the number of immunological active cite or such substance. However, mechanisms of stabilization are still speculative 3, 4, 5 in this period, what we should do is probably to gather the cases that the stabilization of cite number by M-ECT was obvious whichever M-ECT or clozapine is first. These efforts might make the possibility more certain.

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