

Liver Transplantation in a Paranoid Schizophrenic Patient: A Case Report

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Abstract

Solid organ transplantation is an effective treatment modality for end-stage organ failure. The psychosocial evaluation is an important part of the transplantation process because being mentally ill is associated with higher mortality and morbidity rates. Although none of the psychiatric disorders is an absolute contraindication for organ transplantation, some of the transplantation programs exclude patients with active schizophrenia, even some also exclude patients with controlled schizophrenia. Patients with suicidal ideation and history of multiple suicide attempts should also be excluded in most of transplantation programs. There are limited studies in this area and the decision for transplantation is made due to limited data depending on case reports. In this report, a case had diagnosed as schizophrenia, developed liver failure after a suicide attempt and went through liver transplantation is presented.

Keywords: Solid organ transplantation; Psychosocial evaluation; Schizophrenia; Psychiatric disorders

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Introduction

Solid organ transplantation is the most effective treatment modality for patients affected by terminal and irreversible organ failure [1]. Solid organ transplantation is a lifesaving treatment and improve quality of life. The psychosocial evaluation is an important part of the transplantation process because being mentally ill is associated with higher mortality and morbidity rates [1-3]. None of the psychiatric disorders is an absolute contraindication for organ transplantation and the comorbidity with an active psychiatric disorder is accepted as a modifiable risk factor for poor outcome. However most of the transplantation programs exclude patients with active schizophrenia, even some also exclude patients with controlled schizophrenia because these patients may become more psychotic because of immunosuppressive medications and incomppliance to treatment may be a problem [1-5]. In addition most of the transplantation programs exclude patients for current suicidal ideation and history of multiple suicide attempts [2]. It is known that patients with schizophrenia have higher mortality rates than normal population and suicide is the most common reason of premature death in schizophrenia [6,7]. In this report, a case who had been diagnosed as schizophrenia, developed liver failure after suicide attempt and went through liver transplantation is presented.

Case Study

23-year-old male patient has been followed up with the diagnosis of paranoid schizophrenia since he was 17 years old. He had reference and persecution delusions and treated with olanzapine in the past. His adherence to medications was poor and admitted to a psychiatric hospital twice. In one of this hospital admissions 7 sessions of Electroconvulsive Therapy (ECT) was administered. One month after discharge from hospital he discontinued his prescribed medications. The symptoms relapsed and he attempted suicide because of delusions of persecution. Once he jumped from the second floor of his house and in the second time he ate fire-cracker. Fulminant hepatic failure was developed after his last suicide attempt and he was referred to our hospital for liver transplantation. In his emergency psychiatric assessment the patient was evaluated as "psychotic episode with complete remission" based on history taken from his family. Liver transplantation was performed. However after his vital signs stabilized, he developed psychotic symptoms which resulted in introduction of amisulpirid 800 mg/day and haloperidol 10 mg/day treatment. He was also receiving tacrolimus 1 mg/day and ursodeoxycholic acid. His adherence to antipsychotic medications was poor. He experienced persecutory delusions and attempted suicide after transplantation and was admitted to our clinic for psychotic exacerbation. Liver function tests were

normal in his admission. His medications were maintained. He had extrapyramidal symptoms and biperiden 4 mg/day treatment was started. Because of treatment incompliance zuclopenthixol depot and zuclopenthixol 25 mg/day (po) treatment was scheduled. Biperiden and haloperidol was discontinued gradually. As his liver function test levels elevated, he was referred to the transplantation clinic with a pre-diagnosis of subacute transplant rejection. Liver function enzymes decreased but his compliance with antipsychotic medications was poor. Psychotic symptoms exacerbated and he died after a suicide attempt approximately six months after transplantation.

Discussion and Conclusion

Organ transplantation cases are at higher risk for psychiatric disorders. They may develop a new-onset disorder or a pre-existing disorder may exacerbate [3]. Suitability of patients with major mental illnesses such as schizophrenia is controversial in solid organ transplantation. As was illustrated in our case, treatment incompliance and neuropsychiatric effects of immunosuppressive medications are main arguments against transplantation in this population. Active schizophrenia, history of multiple suicide attempts and current suicidal ideation is accepted as a contraindication for organ transplantation in most programmes [2-4]. Limited availability of donor organs and the presence of patients dying on the waiting list without obtaining a transplant show the importance of selection the best candidate for transplantation. The clinical importance of

solid organ transplantations may be evaluated according to their contribution to patients' survival, the reduction of comorbidity, and improvement of quality of life [8,9]. Solid organ transplant programs are far from global needs and there are great differences among programmes regarding inclusion and exclusion criteria [2]. In our case the patient was evaluated in emergency conditions and because the patient was intubated the history of the disorder was obtained from his family and was also based on old medical records. Although the patient had diagnosed as schizophrenia and the reason of the liver failure was a suicide attempt, the patient was accepted for liver transplantation without evaluating his ability to collaborate with the transplant team and providing informed consent, because organ transplantation was vital and urgent for this patient and there was no other treatment option to save his life. But unfortunately, after the operation the psychotic symptoms were exacerbated or continued. Non-adherence with treatment, lack of social support and insight cause a poorer outcome, subacute rejection was developed and the patient died with a suicide attempt 6 months after operation. As a result of the absence of standardized guidelines, especially in emergency situations like fulminant hepatic failure, the decision for transplantation is made due to limited data depending on case reports. Although the decision about each patient is made by the transplant team on a case-by-case basis, the implementation of transplant programs seem to need optimization of transplant clinical practices.

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