

# A clinical case of treatment-resistant schizophrenia: 60 hospitalizations and 342 ECT sessions in 36 years; lack of social support or undertreatment?

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**Özet:** Şizofrenide dirençli olguların oranı %20-25 olarak bildirilmektedir. Tedaviye direnç tanımı birçok otorite tarafından yapılmıştır. Genel kabul gören iki tanımdan biri, farklı atipik antipsikotikler ile en az dört-altı hafta süre ile iki veya üç kez tedavi uygulamasına yeterli yanıt alınmaması; diğeri ise iki farklı tipik veya atipik antipsikotik ilacın dört-altı hafta süre ile monoterapi olarak kullanıldığı, iki farklı tedavi denenmesine rağmen yeterli yanıt olmasındır. Dirençli olguların hastanede kalma süreleri uzundur. Ayrıca tüm harcamalar ve işlev kaybı düşünüldüğünde dirençli olguların topluma maliyetleri daha yüksektir. 60 yaşında, kadın hasta, Aralık 2013 tarihinde oğlu ile geldiği acil servisten homicid riski ve tedavi reddi nedeni ile yatırıldı. Hastalığının 24 yaşında iken postpartum dönemde başladığı, şizofreni tanısı ile takip edildiği, 60 kez yatışı olduğu öğrenildi. Klozapin, haloperidol, amisülpirid, risperidon, olanzapin, aripiprazol, ketiyapin, klorpromazin, sülpirid, zuklopentiksol, flufenazin, lityum ve valproat yeterli doz ve sürede kullanılmasına; toplamda 342 seans EKT uygulanmasına ve yanıt veya kısmi yanıt alınmasına rağmen uzun süreli işlevsellik ve iyilik hali sağlanamamıştır. En son yatışında klozapin 275 mg/gün, valproat 1000 mg/gün ile belirgin düzelme sağlandı. Tüm sağaltım çabalarına rağmen aşırı nüks ve sık yatışı olan şizofreni olgusu tartışılmıştır.

**Anahtar Kelimeler:** Şizofreni, tedavi direnci, sosyal destek

**Abstract:** It is reported that between 20% and 25% of patients have schizophrenia that is resistant to treatment. The treatment resistance in schizophrenia is defined by many authorities. One of the generally accepted definitions is inadequate response despite treatment with different atypical antipsychotics, two or three times at least four-six weeks; the other acceptable one

is although the use of two different typical or atypical antipsychotics in monotherapy during four-six weeks, inadequate treatment response is obtained. Duration of hospitalization in treatment resistant cases is longer. In addition, when considering all the expenses and loss of functions, the cost of resistant cases to society is higher. 60 years old, women patient. She was hospitalized from emergency department where she came with his son, because of denial of treatment and homicidal intent. It is learned that age of onset was 24, disease began in a postpartum period, she was diagnosed with schizophrenia and she had 60 hospitalizations. Although clozapine, haloperidol, amisulpiride, risperidone, olanzapine, aripiprazole, quetiapine, chlorpromazine, sulpiride, zuclopenthixol, fluphenazine, lithium and valproate were used adequate doses and time; a total of 342 ECT sessions were administered; response or partial response was achieved, she had not achieved long-term functioning and well-being. In the most recent admission, she had significant improvement with clozapine 275 mg/day and valproat 1000 mg/day. Despite all treatment efforts, schizophrenic patient with excessive admissions and frequent recurrences is discussed.

**Keywords:** Schizophrenia, treatment resistance, social support

## INTRODUCTION

Lehman et al. defined treatment-resistant schizophrenia (TRS) as inadequate response despite treatment with different atypical antipsychotics, two or three times at least four-six weeks<sup>1</sup>. One of the other accepted definition for TRS is persistence of symptoms after the administration of two different typical or atypical antipsychotics in monotherapy during four-six weeks<sup>2</sup>.

When patients with acute schizophrenia are administered an antipsychotic medication, approximately 50 percent will improve to the extent that they will achieve a complete remission or experience only mild symptoms. The remaining 50 percent of patients improve, but still demonstrate variable levels of positive symptoms that are resistant to the medications. Some patients are so severely ill that they require chronic hospitalization. Others will respond to an antipsychotic with substantial suppression of their psychotic symptoms, but demonstrate persistent symptoms such as hallucinations or delusions<sup>3</sup>. TRS remains common and expensive, despite availability of many treatment options, and contributes to a significant loss in patient's quality of life. Although estimates in the literature vary greatly, TRS has huge medical costs<sup>4,5</sup>.

### AIM

In this case report, a sixty-year-old female with schizophrenia was presented. She had 60 hospitalizations and 342 ECT sessions in 36 years.

### CASE

She is a sixty-year-old female with schizophrenia hospitalized for dangerous behaviors associated with a set of crystallized delusions and auditory hallucinations. Her first psychotic symptoms started at the age of 24 in a postpartum period. She was diagnosed as postpartum psychosis. Her second hospitalization was in 1984. She was applied three ECT sessions and was discharged with diagnose of atypical psychosis. She was hospitalized three times between 1984 and 2001 with serious homicidal and violence behaviors as burning the houses, attacking with a knife to her children. She had a total 21 ECT sessions in these 3 hospitalizations because of her risky behaviors. Her sixth hospitalization was in 2001 with similar complaints. She was diagnosed as schizoaffective disorder. Until 2006, she had 22 more hospitalizations with different diagnoses including manic episodes with psychotic features and rapid cycling, schizoaffective disorder. In these 22 hospitalizations, 216 ECT sessions were administered and the drugs like haloperidol, amisulpiride, risperidone, olanzapine, aripiprazole, quetiapine, chlorpromazine, sulpiride, zuclopenthixol, fluphenazine, lithium, valproate, clonazepam, diazepam were used in adequate doses and duration. She had no long-term adequate functioning and well-being. None of the family members wanted to take care of the patient because of her serious persecutory delusions and behaviors. She had 32 hospitalizations with same complaints and was diagnosed schizophre-

nia between 2006-2013. She had 102 ECT sessions during this time. Clozapine was firstly used in her fortieth hospitalization in 2008 but she refused to take drugs after discharge. In most recent admission, she was hospitalized from emergency department because of acute psychotic symptoms, refusal of treatment and homicidal thoughts. She was initiated on haloperidol 20 mg/day, biperiden 10 mg/day, chlorpromazine 50 mg/day. After 2 weeks, it was seen that persecutive delusions and auditory hallucinations persisted although her aggression and disruptive behaviors decreased. She was started clozapine. Two weeks after initiation the dose had been titrated to 200 mg. Noticeable improvement was produced in her delusions and hallucinations. Her dose was further increased up to 275 mg/day under close control and valproate 1000 mg/day was added. Her PANSS decreased 40% after initiation of clozapine. After her family members were invited to hospital and educated about schizophrenia, symptoms, relapse and medications, she was discharged with clozapine 275 mg/day and valproate 1000 mg/day. Although her family did not get in contact with health care team after discharge, medical records showed that she hadn't any hospitalizations.

### DISCUSSION

In this case report, a treatment-resistant schizophrenia patient with 60 hospitalizations is presented. It is interesting to note that she had frequent hospital admissions after 2001, although she achieved response in earlier hospitalizations. When discussed with family, all of the family members were seen in shame, helplessness and frustration. Health care workers also can share similar feelings like hopelessness and anger during treatment of extremely challenging cases. Despite sixty hospitalizations, family members didn't receive a complete psychoeducation. The patient's treatment is limp after discharge and process inevitably ends in hospital. It is known that family members had a important role in providing care for patients with mental illness. Ossman et. all stated that the duration of hospitalization had a significant negative correlation with functional support properties and frequency of contact<sup>6</sup> Caregivers of mentally ill patients generally distinguishes between objective and subjective burden. *Objective burden* refers patients' disruptive behaviors and negative symptoms. *Subjective burden* refers to the emotional reactions of caregivers' to the situation<sup>7</sup>. In literature it is reported that family psychoeducation interventions had reductions in illness relapse, negative symptoms and inpatient service utilization<sup>8</sup>. Modifications to *multiple family*

group treatment and family interventions may more effectively deal with the burden that could result from this increased awareness<sup>9</sup>. Most patients with schizophrenia will benefit from a combination of pharmacotherapy and psychosocial interventions. Therefore, psychoeducation as a part of treatment can be frequently ignored by medical personal and it unfortunately ends in under-treatment and treatment resistance. The use of “resistance” suggests that nothing can be done to improve schizophrenic symptoms. The term of “resistance” is better viewed as “incomplete recovery”, a term reflecting the potential for newly improved therapeutic outcomes<sup>10</sup>. Social support and psychoeducation for family should be taken into consideration as therapeutic methods. Bustillo et al. reported that family therapy and assertive community treatment have effects on the prevention of psychotic relapse and rehospitalization<sup>11</sup>. Yildirim et al. states that after psychoeducation, significant difference was found between the experimental group and control group in terms of family functioning of caregivers and it was determined that medication noncompliance rate reduced from 40.6% to 21.9%<sup>12</sup>. Also, Zhang et al reported that compared with the control group (from 26% reduced to 23%), the experimental group whose family had psychoeducation (from 32% reduced to 18%) showed a reduction in annual relapse rates<sup>13</sup>. Psychosocial treatments may also improve the response to pharmacotherapy by improving medication compliance. This was suggested in a study in which patients received a form of family treatment that also encouraged medication compliance. In addition, specific compliance-focused group sessions have been shown to be helpful. Other studies have indicated that psychosocial treatments, particularly family treatment, may decrease the amount of stress that the patient experiences within the family, and that this, in turn, decreases the amount of antipsychotic medication required by the patient. Providing better social support and educating the family can provide better care to the patient and improve the prognosis in a disabling disorder

like schizophrenia

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