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Original Article

Patients diagnosed with mood disorders treated with eletroconvulsive therapy and family perception

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Objective: to discuss the family perception of patients diagnosed with mood disorders undergoing treatment with electroconvulsive therapy. **Methodology:** a qualitative, descriptive study conducted in a private psychiatric hospital in Belo Horizonte, Minas Gerais, Brazil, with relatives of patients with mood disorders undergoing electroconvulsive therapy. Data collection performed through interviews and field diaries. For data analysis, Content Analysis was used and the webQDA software was used for qualitative data analysis. **Results:** treatment with electroconvulsive therapy was associated with improvement in the patient's clinical picture. **Conclusion:** further research is needed to evaluate adherence to electroconvulsive therapy by patients and the understanding of its risks and benefits.

Descriptors: Electroconvulsive Therapy; Mood Disorders; Family Relations; Mental Health.

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Percepção de familiares de pacientes com diagnóstico de transtorno do humor em tratamento com eletroconvulsoterapia

Objetivo: discutir a percepção familiar de pacientes com diagnóstico de transtornos de humor submetidos ao tratamento com eletroconvulsoterapia. **Metodologia:** estudo qualitativo, descritivo realizado em um hospital psiquiátrico privado de Belo Horizonte, Minas Gerais, Brasil, com familiares de pacientes com transtornos do humor em tratamento com eletroconvulsoterapia. A coleta de dados foi realizada por meio de entrevista e diário de campo. Para a análise de dados foi utilizada a Análise de Conteúdo e o *software* webQDA para a análise dos dados qualitativos. **Resultados:** o tratamento com eletroconvulsoterapia foi associado à melhora no quadro clínico dos pacientes. **Conclusão:** é necessária a realização de pesquisas que avaliem a adesão à eletroconvulsoterapia pelos pacientes e a compreensão sobre seus riscos e benefícios.

Descritores: Eletroconvulsoterapia; Transtornos do Humor; Relações Familiares; Saúde Mental.

Percepción familiar de pacientes diagnosticados con trastornos del humor y tratados con terapia electroconvulsiva

Objetivo: discutir la percepción familiar de los pacientes diagnosticados con trastornos del estado de ánimo en tratamiento con terapia electroconvulsiva. **Metodología:** estudio descriptivo cualitativo realizado en un hospital psiquiátrico privado de Belo Horizonte, Minas Gerais, Brasil, con familiares de pacientes con trastornos del estado de ánimo sometidos a terapia electroconvulsiva. Recolección de datos realizada a través de entrevistas y diarios de campo. Para el análisis de datos, se utilizó el *software* de análisis de contenido y webQDA para analizar los datos cualitativos. **Resultados:** el tratamiento con terapia electroconvulsiva se asoció con una mejoría en la condición clínica de los pacientes. **Conclusión:** es necesario realizar investigaciones para evaluar la adherencia de los pacientes a la terapia electroconvulsiva y la comprensión de sus riesgos y beneficios.

Descriptores: Terapia Electroconvulsiva; Trastornos del Estado de Ánimo; Relaciones Familiares; Salud Mental.

Introduction

Electroconvulsive therapy (ECT) has been used in the treatment of patients with severe mental disorders as a somatic therapy with good results in some cases, although there is no consensus regarding its indication, duration, and frequency of administration, nor among the professionals who prescribe it as a therapeutic proposal[1].

The duration of treatment with ECT is a controversial topic, and some studies consider six to 10 cycles with concomitant use of psychotropic drugs, while other studies point to the use of ECT for a few months or even years, in a crisis-preventive manner, followed by neuropsychological evaluation as an essential part of good clinical practice in services[1-4].

According to the World Health Organization, depression is the leading global cause of disability in the world, with approximately 350 million people suffering from depression[5-6]. In the United States of America, approximately 100,000 people receive ECT annually[2-4].

ECT may be the treatment of choice for major depressive disorder when associated with a suicide attempt, suicidal ideation, life-threatening disorders due to refusal of food or fluids, and depressive disorder associated with marked psychomotor impairment, delusions, and hallucinations. Regarding the patient's choice of treatment, this may be influenced by preference, previous experience of ineffective and/or intolerable treatment, and the good results after previous treatment with ECT[7].

Other indications for the procedure are associated with achieving rapid short-term improvement of severe symptoms, based on the evidence that other treatment options have proven ineffective. When indicated for cases of bipolar disorder in the euphoria phase, ECT may be considered in the presence of physical exhaustion and life-threatening symptoms, but it is not recommended as a maintenance therapy because its long-term benefits and risks have not been established[2-4].

Although it does not require mental health legislation to support its use based on scientific evidence, ECT is usually administered to patients who voluntarily consent. When the patient is considered incapable of deciding, family members sometimes consent to the procedure[8].

In practice, the consent process for ECT requires a detailed explanation of the procedure and its risks and benefits. The person who consents must have the capacity to make this decision and consent must be given freely, without coercion, which has been studied by some authors[8].

Regarding risks, ECT is associated with significant side effects, such as memory loss. Cognitive side effects are sometimes underestimated and may last longer after full treatment than expected. This associated cognitive impairment can cause significant functional difficulties. Some patients after treatment have had residual manic and psychotic symptoms[7].

The reduction of cognitive adverse effects of treatment drives the search for consensus on the use of ECT, reviewing its indications, the need for informed consent free of actions that characterize coercion, and how the treatment is prescribed[9].

Cognitive assessment during ECT treatment is often not comprehensive enough and is limited to a superficial bedside assessment. A proactive approach to careful neuropsychological assessment and consideration of combination treatment with maintenance medications after therapy are essential[10].

The use of ECT has multiple effects, and many mechanisms have been proposed to understand its unfolding, including changes in serotonin sensitivity, direct seizure effects, increased hormone secretion and neurogenesis, and glial changes[11]. It has a considerable stigma, produced largely by scenes in movies, positions of professionals for and against the treatment, reports of abuse and inappropriate use of the treatment in hospitals, and reports on the subject that have shaped society's understanding of ECT. Early treatments without precise indication, lack of experience and training of professionals, and its use without sedation also contributed to the reservations about the treatment[12].

On the other hand, the technology developed for ECT equipment, the electrical stimulation as a treatment option, the use of sedation during the procedure, the better site for electrode placement, and the pulse forms have improved safety and reduced the procedure's adverse effects[12].

Thus, patients and their families can have access to accurate and safe information about the risks and benefits of treatment. The family, in this case, plays a fundamental role to offer support during treatment; however, when family members do not have enough information about the symptoms of the disorders, the course of the disease, and the treatment in general, a therapeutic approach becomes something complex to handle, jeopardizing the family support that could be offered to the patient during treatment[13].

A qualitative study has evidenced that patients would like the family to participate more effectively in the decision-making process regarding ECT, including that a family member should accompany its performance to have knowledge and safety on how the procedure is carried out[14]. Family members who attended the ECT session reported that having followed the procedure calmed their fear and insecurity about the procedure, evaluating the experience as calm or rewarding and recommending other family members to follow the session[15].

Family support in situations of illness is fundamental; for mental disorders, given the chronicity

of symptoms, this support influences not only the choice of treatment but also the relationship between family and patient, which can have a positive effect on the quality of life of both. However, to offer support, the family must be involved in the patient's treatment and informed about the therapeutic options.

Based on the above, we present the results of this study that aimed to discuss the perception of family members of patients diagnosed with mood disorders undergoing treatment with ECT.

Methodology

This is a qualitative descriptive study carried out in a private psychiatric hospital located in the city of Belo Horizonte, Minas Gerais, Brazil. The hospital's ECT service serves inpatients and outpatients of the city, the metropolitan region, and the state of Minas Gerais. The research subjects were family members of patients with mood disorders who underwent treatment with ECT at the time of data collection. Inclusion criteria were: to be of legal age and to have a family member diagnosed with severe and refractory depression or bipolar mood disorder being treated at the hospital.

The information was collected between 2016 and 2017, through a recorded interview guided by a semi-structured script that addressed issues related to mood disorders, treatment with ECT, and the family member's perception of it. A field journal was used to record the researcher's impressions after each interview. The interviews were conducted in the waiting room at the hospital while the family members were waiting for their relatives to undergo the procedure.

The information was analyzed using Content Analysis, as proposed by Bardin[16], and the qualitative analysis software (webQDA). The project was approved by the Research Ethics Committee of the Federal University of Minas Gerais, Brazil (Opinion No. 35574914.3.0000.5149).

Results and Discussion

The categories defined after the analysis of the results were: (1) Indication of treatment and perception of improvement of symptoms, (2) Family member's perception of treatment. For the presentation of the results, the research participants were identified using the letter P, followed by an identification number. We interviewed 20 relatives of different patients, aged between 25 and 78 years, whose relationships were parental (4), filial (7), conjugal (5), and other (4).

Indication of treatment and perceived improvement of symptoms

Mood disorders alternate between depressive pictures and episodes of euphoria or hypomania in bipolar mood disorder, while depressive disorders have only depressed mood pictures[17].

The possibilities of treatment for mood disorders are pharmacological treatment, psychotherapy, and ECT, whose objectives are the reduction of acute symptoms and behavioral changes, and the prevention of relapses[18]. Regarding the pharmacological treatment, a study carried out with patients in the substitutive services of the Mental Health Network showed a higher prevalence of the use of antidepressants, followed by antipsychotics and anxiolytics, and one-third of these drugs presented at least one side effect, which is widely reported by the patients' relatives[19].

The medications helped, but they also generated side effects, such as sleepiness, dispersion, and lack of memory, so we had to be always alert. (P4)

Besides this, there are cases in which the drug therapy does not reach the effects desired by patients, relatives, and professionals, which also causes dissatisfaction.

He was only taking the lithium, and alone it wasn't worth anything anymore, it didn't do any good, even the doctor said it wasn't good anymore. (P18)

The medications were very bad, there was no result, and it didn't improve anything. She didn't respond to any medication. (P6)

National studies showed a prevalence between 32% and 46% of non-adherence to drug treatment, associated with younger individuals, partners, and higher education[19]. In these cases, it is common for the professional responsible for the treatment to indicate other therapeutic modalities. Among the reports, ECT indications are identified.

The doctor saw that the medications were no longer having any effect, so he called the family to talk and explained how the procedure was, and that he was only going to do ECT because the medications were not having any effect. (P5)

What led to the initiation of ECT was the conversation with the psychiatrist and, by mutual agreement, they saw that the medications were no longer working and they preferred to start ECT. (P13)

Despite the availability of psychopharmacological treatments, scientific evidence indicates that only 60-70% of people using antidepressants will respond to first-choice drug therapy; furthermore, at least one-third of people with major depressive disorder who receive drug therapy will become resistant to treatment[5-6].

ECT is considered an effective treatment for severe forms of depression, characterized by suicide attempts, catatonia, resistance or intolerance to pharmacotherapy, bipolar and unipolar affective disorder, and major depressive disorder in the elderly[2-4]. We observed a case in which ECT was requested as a therapeutic option by the patient himself.

He keeps researching a lot on the internet, so he researched about the procedure because he was very frustrated with the

medications. So he went to the psychiatrist and informed him about the procedure, because he realized that in his case, with many medications, a long time, and no effect, it might fit. (P12)

Antidepressants and ECT are synergistic, enhancing the treatment of the individual and helping to prevent relapses. Given the specificities of each therapeutic approach, associations are frequent, in which results are achieved more effectively[20].

I see the efficacy, but I think that medication alone does not solve it. In his case the ECT is being very good, with medication monitoring, he can't be without one. (P2)

I think that we have to have ECT together with the medication, it's no use being only one, from what I understand. It's no use doing ECT if you don't take medicine, not in her case. In her case, the two have to be associated. (P3)

Electroconvulsive therapy reduced the number of seizures and hospitalizations in bipolar disorder and, together with drug treatment, had a stabilizing effect on the course of the disease. Although ECT treatment for depression is effective, the high relapse rate is a critical problem and points to the need for concomitant use of psychotropic drugs and mood stabilizers, thus reducing the risk of relapse[21].

It is observed that the family identifies issues related to therapeutic nonresponse to medications as justification for indicating treatment with ECT, as well as the results of therapy and the need for coordinated treatment between ECT and medication use.

Perception of the family member about the treatment

The literature points to records of the use of ECT in an indiscriminate, polemic manner and without therapeutic criteria, with the purpose of controlling and punishing patients in psychiatric hospitals, the recurrent practices in psychiatric care before the Psychiatric Reform in Brazil and worldwide, which collaborated to the view of an aggressive and punitive procedure[12,22].

My knowledge was of horror movies, and I would sit on the chair and take a shock and stretch all over. (P6)

For us it was a discussion because I see that there is a certain prejudice against ECT because this method was used in the past, it was very aggressive, so we tried to find out more about it, how it was nowadays, and what we were told was that it was not performed as before, that it does not take away the structure of the person, that it is not so strong, but that it had a very good effect, so we decided to bet. (P16)

This treatment currently suffers a lot of prejudice due to the way it was used in the past. But as it has been updated, it has sedation, updated equipment, and very precise electrical discharge, so it generates comfort and safety for the patient and family members. (P4)

Breaking this barrier is difficult, the patient must be aware that he has to do what is best for him and not think about what the neighbor will say, what others will say. You don't have to listen to the opinion of those who are ignorant, and who don't understand the efficacy of the treatment. (P4)

Despite the improvement of the technique and the consequent reduction of side effects, some are still common, such as nausea, headache, myalgia, and memory loss[22-23]. Memory loss was present in the family members' reports.

She has memory loss of recent episodes, old things she doesn't lose [...]. She doesn't present other side effects, only headache after ECT, on the day. (P1)

She is having a lot of recent memory loss, had an absence crisis, and her memory is very bad. She has no other side effects. (P8)

Retrograde and anterograde memory deficits were present among cognitive changes reported due to ECT. Differences in treatment modalities (e.g., electrode placement, pulse form, treatment frequency, and dosing) have an impact on the incidence and duration of cognitive impairment in people with depression[24].

When used in the treatment of schizophrenia ECT showed less transient cognitive impairment than expected based on the rate of cognitive impairment seen in ECT for depression[24].

Informed choice is one of the ethical foundations of healthcare practice. Thus, it is necessary to provide the individual and the family with an autonomous and informed choice, providing information about the procedure, technique, benefits, risks, side effects, and response time[23,25]. Doubts about the treatment should be clarified to the individual, avoiding the mission of crucial information, and leaving the final decision to him. It is up to the individual to make the final decision. Attempts by the health team to perform qualified therapeutic listening and consider the subject's desire for information is valid, also opting for empathy and respect[23,25]. The qualification of healthcare professionals to guide and clarify doubts about ECT is necessary[26].

Among the benefits pointed out by the literature are mood improvement, anxiety, and stress reduction, besides lesser side effects and quicker responses when compared to drug therapy[22,27-28].

When she started the drug treatment, she just stayed at home and slept, and after the ECT we noticed that she is more up, she is feeling better herself. (P1)

The use of ECT was associated with shorter hospitalization times and cost-benefit advantages[22]. Family members are clear that ECT alone is not enough to treat and improve the quality of life of the mentally ill, but associations of therapeutic approaches contribute to the stabilization of the condition. Knowing the perception of family members about the therapeutics used in the treatment of their loved one contributes to the assistance of the team involved in the treatment, especially for Nursing.

The limitations of the study are associated with the fact that it was carried out in only one health service and that the patients and health professionals were not heard regarding the theme.

Conclusion

The perception regarding the treatment with ECT was associated with the improvement in the clinical picture of patients and the presentation of ECT as a biological treatment for mood disorders, resulting in greater involvement of the family in the treatment and consequently support for the patient.

It is emphasized the importance of the health teams in the realization of psychoeducation directed to information about the biological and non-biological treatment at the time of proposing the therapy, clearly informing about the risks and benefits of treatment.

It pointed out the need for research that evaluates the adherence to ECT by patients, and how the procedure is presented by the team to family members and patients. It is observed based on the literature consulted that there is not enough evidence to settle the debate about the use and indication of ECT. A desirable outcome would be to conduct surveys among patients and healthcare professionals about the perceived risks and benefits of treatment.

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