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Post-COVID Syndrome in Bipolar Affective Disorder Patient

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Abstract

Background: Post-COVID is a multifactorial disease that describes the residual effects of acute COVID-19 infection that are continuous or relapsing and in remission. The study found that 87% of people who recovered and were discharged from the hospital showed persistence of at least one symptom even within 60 days. COVID-19 patients who have bipolar disorder require therapeutic adjustments to avoid specific drug interactions between psychotropic drugs and those used in COVID-19 protocols.

Objective: To determine the treatment of post-COVID patients with bipolar affective disorder.

Methods: Collect and analyze research articles on Update Therapy for Post-COVID Syndrome Patients with Bipolar Affective Disorder. These articles were obtained by searching using *Google Scholar, PubMed/NCBI, and SAGE Journal.*

Results: The use of combination drugs between antipsychotics and antidepressants with hydroxychloroquine/azithromycin is not recommended because it has side effects that can induce psychiatric symptoms. COVID-19 patients with bipolar disorder (BD) who do not respond to pharmacotherapy may receive electroconvulsive therapy (ECT). Non-pharmacological therapies such as counseling and the use of telepsychiatry are effective in treating mental health and overcoming adverse psychological effects.

Conclusion: COVID-19 patients with bipolar affective disorder require unique therapy to avoid drug interactions and pharma-cotherapy. Non-pharmacological efforts include counseling and telepsychiatry to cope with emotional distress and mental health challenges. However, challenges remain in providing care for these patients.

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INTRODUCTION

Post-COVID syndrome is a multifactorial disease describing the effects of residual acute COVID-19 infection. Recent literature finds that 10% of patients in the UK have persistent or progressive symptoms after the resolution of acute viral infection[1]. In other words, "Post-COVID Syndrome" because it is continuous or relapsing and in remission[2]. A report in Italy found that 87% of people who recovered from COVID-19 showed persistence of at least one sequelae of COVID-19 for 60 days. Of these, 32% had one or two symptoms, while 55% had three or more. The most frequently reported complaints were fatigue (53.1%), poor quality of life (44.1%), joint pain (27.3%), shortness of breath (43.4%), and chest pain (21.7%). Other reported symptoms include cough, skin rash, palpitations, headache, diarrhea, and a 'tingling' sensation. In addition, patients also report mental health problems such as anxiety, depression, and post-traumatic stress disor-der[3].

Problems in mental health during the COVID-19 pandemic put an individual, even a community, at risk of having difficulty adjusting to new situations[4]. A recent review found that people with bipolar disorder are at risk for poorer physical and mental health due to a lack of health and emotional support[5]. Bipolar affective disorder is a disease that involves episodes of severe mood disorders, neuropsychological deficits, immunological and physiological changes, and disturbances in functioning[6]. Therefore, the purpose of this Literature Review is to review post-COVID sufferers with bipolar affective disorder. It is hoped that this recommendation aims to consider treatment for people with bipolar disorder during the COVID-19 pandemic crisis.

METHODS

The making of this Literature Review is done by collecting and analyzing information from sources that follow the formulation of the problem from accredited journals such as the journal PubMed, Google Scholar, and SAGE with the year published from 2016-2021. The review keyword used in this article is (((Post COVID Syndrome) OR Long COVID-19) AND Bipolar Affective Disorder) AND Mental Disorder) AND Therapy. Articles and journals were selected according to inclusion and exclusion criteria for academic research purposes. The criteria for all checked articles are 20162021 articles, with the full text of the latest information on the treatment of COVID patients with Post Covid-Bipolar Affect Disorder (Long-COVID-Syndrome). In parti-cular, the latest information on the treatment of Post Covid patients is posted. Bipolar affective disorder is treated—by Covid (long COVID syndrome). The corresponding 18 articles were managed by the Mendeley Reference Manager application and summarized.

DISCUSSION

Long COVID Syndrome

Long COVID syndrome is a term that describes the presence of various symptoms after SARSCoV2 infection at least four weeks after the onset of the diagnosed COVID-19 disease, regardless of viral status. According to another study, Long-COVID syndrome or post-

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COVID occurs through a variety of mechanisms, including post-intensive care syndrome, viral fatigue syndrome, and permanent organ damage[7]. Common symptoms include persistent shortness of breath, malaise, and cough, while other reported symptoms include chest pain, palpitation, neurological and cognitive deficits, rashes, and gastrointestinal dysfunction[1]. In some cases, COVID-19 patients have tested positive for SARSCoV2 for up to 3 months using the reverse transcription real-time polymerase chain reaction (RT-PCR) test. In addition to gastrointestinal symptoms, long-term release of SARSCoV2 in feces for up to 2 months has also been demonstrated. According to a recent study, SARSCoV2 nucleic acids and proteins were found in the small intestine of 50% of 19 asymptomatic COVID cases 4 months after onset. Several studies suggest that SARSCoV2 may persist in the body and cause immune activation leading to the long-term presence of COVID[8]. According to an Italian study, 87% of patients who recovered and were discharged had at least one sign persisted within 60 days3. Of these, 32% had one or two symptoms, and 55% had three or more. Commonly reported problems were fatigue (53.1%), poor quality of life (44.1%), shortness of breath (43.4%), arthralgia (27.3%), and chest pain (21.7%)7. Another study in China found that up to 2,469 COVID-19 patients were discharged, of which 33 (1.3%) died primarily from radical deterioration of the lungs, heart, and kidneys[9].

Currently, no drug has been shown to improve or alleviate Post COVID symptoms, but treatment is given after persistent COVID-19 symptoms such as tachycardia and tachycardia disorders. Palpitations during non-pharmacological treatment that can be performed are rehabilitation and personalized[8].

Bipolar Disorder

Bipolar disorder (BD) is a continual affective ailment characterized by dramatic temper, thinking, conduct, and energy[10]. Consistent with Rowland, bipolar affective sickness is a sickness that includes episodes of excessive mood disorders, neuropsychological deficits, immunological and physiological changes, and disturbances in functioning. Bipolar disease reasons incapacity globally, with a high price of untimely loss of life because of suicide with medical comorbidities[6].

The prevalence of type I bipolar ailment is discovered to be around 1% inside the preferred population. A cross-sectional survey of 11 international locations noted that the overall occurrence of bipolar spectrum disorder is 2-3%, with 0.4% for type II BP[6]. A recent meta-analysis of 25 studies observed a pooled lifetime incidence of 1.06% and 1.57% for kind I and II BP, respectively. Maximum of the covered research had been from North or South US, in addition to the consequences acquired from the look at the identical inside the United Kingdom, Germany, and Italy and in evaluation systematic review of studies from African countries observed a lifetime prevalence of among zero.1-1.83%[6]. Until 2014 in Indonesia, there were no facts on the public bipolar ailment. Nonetheless, based on Riskesdas' information in 2013, the prevalence of emotional and mental issues reached around 14 million human beings, or 6% of the overall population in Indonesia[7].

It is known that psychosocial factors display a full-size impact on the discovered variability

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within the affective direction of signs and symptoms, consisting of the nice of own family relationships and social help play an essential position inside the evolution of the disease and the unfavorable results of existence activities can cause the incidence of an episode or postpone full recuperation[11]. BP I sickness changed into described as a first-rate depressive episode wherein at least one crucial criterion (presence of mood despair or anhedonia) endured for ±2 weeks in evaluation symptoms of BP-II sickness were characterized by a manic or hypomanic episode of at the most minor one essential criterion (improved mood, expansive, or irritable) persists for ±7 days (mania) or ±4 days (hypomania)[12,13].

Long-COVID's Relationship with Bipolar Disorder

A have a look at located that patients with COVID-19 undergoing treatment in the sanatorium have been liable to experiencing symptoms of intellectual disorders (thirteen). A conducted by Helms et al. determined delirium in 65% of sufferers admitted to the in-depth care unit and agitation in 69% of patients treated with similar conditions. Some others have a look at also discovered altered recognition in 21% of patients. Evaluation of any other 33% put up-treatment in the extensive care unit suffered from impaired govt function, which may be related to hypoxic encephalopathy and encephalitis. Throughout the acute infectious phase, approximately 20 to forty% show off neuropsychiatric symptoms along with insomnia (42%), impaired interest or concentration (38%), anxiety (36%), memory impairment (34%), psychological misery (33%), confusion (28%), and altered awareness (21%)[14].

People with Bipolar Disorder (BD) at some point during the COVID-19 pandemic have a high possibility of triggering a greater extreme and risky ailment path, characterized with the aid of an elevated threat of melancholy or mania recurrence, affective lability, impulsivity, and risk-taking conduct, alcohol consumption, or abuse materials or even suicide attempts. Trauma burden might also play a vital role in BD patients. COVID-19 patients with BD problems are prone to delirium, agitation, decompensated psychosis, or temper issues and require a psychiatric evaluation. The impact of SARS-CoV-2 infection on the mind is related to immoderate physical and mental stress, so stimulating the hypothalamic-pituitary-adrenal axis will then get worse the inflammatory status with the length and frequency of exposure to stressors on the anxious system. In this feel, at the same time as responses to quick and mild stressors may be beneficial, repeated or prolonged exposure to solid stressors exacerbates irritation. Long-lasting exposure to stress enhances the inflammatory reaction by freeing several seasoned-inflammatory factors that trigger downstream signaling pathways, which include NF-kB-based transcription. The contribution of glucocorticoids related to the strain response in maintaining and selling neuroinflammation that outweighs the results stems from the activation of signals downstream of that receptors[15].

Consequently, someone with bipolar affective ailment turns into very in danger of experiencing Covid-19. As defined, a location from Australia pronounced that patient with mood issues, mainly BD, will revel in higher fees of despair and fashionable misery during the COVID-19 pandemic, given the significant

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mental and bodily outcomes[5]. Multiplied depression and suicidal ideation and extended pro-inflammatory and decreased anti-viral immune responses in BD patients may additionally increase susceptibility to COVID-19. Its miles regarded that patients with natural comorbidities are in serious danger of infection, and that is associated with BD and numerous other scientific disorders[11].

Pre-Covid and Post-Covid Bipolar Affective Disorder Therapy

Pre-Covid bipolar disorder treatment

Treatment choices for bipolar disorder can be broadly classified into different medicines, such as disposition stabilizers, antidepressants, antipsychotic drugs, electroconvulsive treatment (ECT), and psychosocial medications. The utilization of this drug is based on the stage of bipolar disorder, such as mania/hypomania/depression/mixed[16]. In one consider, the arrangement of IPSRT (Interpersonal and Social Cadence Treatment) essentially expanded the AMI (Substitute Stamp Reversal) file. This instrument gives an exact picture of psychopathological status when evaluating the severity and term of disposition changes all through life. These come about affirming the significance of complementing pharmacological treatment with psychotherapy in bipolar disorder in naturalistic settings. Patients treated with IPSRT furthermore pharmacotherapy reported improvement in affective and anxiety symptoms without requiring alteration of disposition stabilizer dosage. This result is affirmed by the diminishing in AMI records at 3 and 6 months. It ought to be emphasized the significance of IPSRT in reducing the mental burden of bipolar disorder and preventing mood relapse[15].

Bipolar Disorder Therapy during Post-Covid/Long Covid

Patients with bipolar disorder who have COVID-19 may require helpful alterations to avoid particular drug interactions between psychotropic drugs and those utilized in COVID-19 helpful conventions. Thus, the utilization of certain antipsychotics utilized as disposition stabilizers or certain antidepressants may increase the risk of heart-beat rhythm, particularly torsade's de pointes, particularly with the hydroxychloroquine/azithromycin combination. This includes earlier cardiac appraisal and daily checking of the ECG but, moreover, exchanging to atomic psychotropics with less cardiotropic impacts when required. The utilization of benzodiazepines and hypnotics ought to be conditioned by the nonattendance of the hazard of respiratory trouble and liver disappointment for which these atoms contraindicate. In common, the concomitant utilization of psychotropic sedate and other drugs that will be utilized within the administration of patients with COVID-19 infers closer observing of diverse physiological capacities, in specific heart, liver, kidney, respiratory function, and blood counts[17].

Other sources state that critical side impacts that can happen after the utilization of HCQ in COVID patients with BP are anorexia, the runs, sickness, QT prolongation, cardiac arrhythmias, hepatitis, pancreatitis, neutropenia, and some of the time acceptance of psychiatric side effects, such as psychosis, self-destructive ideation self, and mood disorder. It is suggested to maintain a strategic distance from concurrent utilization of HCQ with antipsychotic and upper drugs, which drag out the QT

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interim, and to meet patients for mental dis-arranges sometimes recently endorsing HCQ. Patients with COVID-19 and severe psychiatric side effects who do not react to pharmacotherapy may require electroconvulsive treatment (ECT). However, performing ECT on patients with COVID-19 may be a challenging issue. General anesthesia and noninvasive ventilation with the help of a mask bag are required to perform ECT. Close contact with the patient's mouth and airway secretions, the production of aerosols and tiny droplets, and the need to repeat ECT sessions increase the likelihood of virus transmission. Therefore, physical situations jeopardize the safety of patients and medical staff[18].

Bipolar Non-Pharmacology Therapy during Covid

A study states that telephone counseling is more efficacious in dealing with the increased emotional distress of various cases and helps to overcome adverse psychological effects, including post-traumatic stress symptoms, confusion, anger, frustration, and boredom. Other behavioral strategies based on virtual groups to reduce somatic and autonomic hyperarousal distress include meditation, yoga, and mindfulness. Digital tools allow for remote intervention to minimize face-to-face contact without compromising care and contribute to helping as many patients as possible[11]. The role of telepsychiatry in clinical care and outcomes during COVID-19, according to several growing studies supporting the safe and effective use of telepsychiatry in a variety of clinical settings and has shown strong and consistent evidence to support its feasibility, user acceptance, lower costs, and outcomes in a variety of mental health diagnoses. Increased use of telepsychiatry may provide an effective means of increasing access to mental health care, but challenges remain in providing care for patients with bipolar disorder at all levels of care during the COVID-19 pandemic[19,20].

CONCLUSION

People with COVID-19 with bipolar affective disorder have specific therapy that is different from bipolar disorder in the absence of COVID infection. Bipolar therapy of post-COVID patients requires therapeutic adjustments to avoid specific drug interactions between psychotropic drugs and those used in COVID-19 therapeutic protocols. COVID-19 patients with bipolar affective disorder who do not respond to pharmacotherapy treatment require electroconvulsive therapy (ECT). The non-pharmacological therapy efforts include counseling and safe and effective use of telepsychiatry to cope with increased emotional distress and assist mental health care in overcoming adverse psychological effects, including post-traumatic stress symptoms, confusion, anger, frustration, and boredom. However, many challenges remain in providing care for patients with bipolar disorder at all levels of care during the COVID-19 pandemic.

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