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BRIEF ORAL PAPERS: COVID Track: COVID-19

Characteristics of COVID-associated versus Other Deliria: A Retrospective Chart Review of 152 Inpatient Psychiatric Consultations in 2020



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Background/Significance: The Coronavirus Disease 2019 (COVID) is a significant driver of morbidity and mortality worldwide, and, despite the advent of several vaccines, genetic variants and the complexities of population health management threaten to maintain it as such. Data are emerging as to the scope of neuropsychiatric manifestations and sequelae of COVID infection; in terms of severe acute manifestations, delirium appears to be highly prevalent.¹ Previous work has suggested that COVID delirium may, by virtue of its etiopathogenesis, present with stereotyped syndromes (eg, with abulia, alogia, rigidity), which may distinguish it from delirium associated with other illnesses.² Our study aims to elucidate the clinical characteristics of COVID delirium, as compared to non-COVID delirium.

Methods: We conducted an exploratory retrospective chart review using electronic health record (EHR) data from all adults who were admitted to Massachusetts General Hospital and received in-person psychiatric consultation for delirium March – May 2020, grouped by whether or not a current diagnosis of COVID was given. In each group within the cohort, we assessed variables relating to demographics; medical and psychiatric history; medication use prior to admission and in-hospital; vital signs; laboratory and imaging findings; and features of neuropsychiatric examination. Between COVID-status groups, we made multiple comparisons, including of the rates between previously described unique features of COVID delirium to determine whether these features are more common in delirious patients with COVID.

Results: Seventy-three COVID-negative delirious patients and 36 COVID-positive delirious patients were ultimately included in analysis. These groups were not significantly different in sex distribution (~60% male), median age (mid-60s), or race (mostly white). Those with COVID-delirium were more likely to have come from a skilled nursing or rehabilitation facility ($p = .001$); to have had a history of psychosis ($p = .043$) but lower medical comorbidity burden ($p = .003$); and to have demonstrated myoclonus, hypertension, withdrawal, akinesia, abulia, and alogia ($p < 0.05$). They were also more likely to be treated with ketamine ($p = .005$), PO/TD alpha-adrenergic agents ($p = .014$), and enteral antipsychotics ($p = .007$).

Discussion: Confirming prior work, abulic-spectrum features were more common in COVID-delirium than in other deliria.

Conclusions: Our results may facilitate safer and more efficacious management and rehabilitation, and greater understanding of the neuropsychiatry of COVID infection.

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Racial Disparities in Psychiatric Treatment Among Patients Positive for COVID-19 During Pregnancy



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Background: The COVID-19 pandemic has disproportionately devastated Black patients, both in regard to disease incidence and mortality, and COVID-associated mental health burdens (2). This, coupled with research suggesting that pregnant women are vulnerable to COVID-related psychosocial stressors (3), provides imperative to study racial disparities in mental health outcomes among pregnant women during the COVID-19 pandemic.

Methods: Retrospective chart review: Patients were eligible if they tested positive for COVID-19 prior to delivery and received obstetric care from a Cleveland Clinic provider between March and December of 2020. We matched for age, race, marital status, and zip code to identify control patients (negative COVID-19 test prior to delivery).

Results: 645 charts were reviewed. Of the 129 patients positive for COVID-19 prior to delivery, 28.8% were Black, 63.2% were White, and 8.0% were Other. Ratios approximately were the same for the 516 patients negative for COVID-19. In the COVID positive cohort, 66.7% of Black patients and 75.9% of white patients attended at least one postpartum visit. Among these patients, 20.8% of black patients had a positive brief depression screen, and 11.7% of white patients attending these visits had a positive brief screen. In the COVID negative cohort, black patients also had lower postpartum attendance rate compared to white patients (70.8% vs 82.6%). Among patients who attended a postpartum visit, black and other patients showed higher positive brief screen rates compared to white patients (29.8% vs 20.6% vs 14.2%, respectively). Prior to pregnancy, a higher rate of white patients received psychotropic treatment compared to black patients (14.6% vs 30.1%). The racial breakdown of patients using pre-pregnancy psychotropic medications was similar for the COVID positive cohort.

Discussion: The disproportionate representation of Black patients among positive cases is concerning considering that prior to pregnancy, a higher rate of white patients received psychotropic treatment compared to black patients. This supports past research suggesting that minority women are particularly at risk for under-treatment of psychiatric conditions (1). Poorly managed psychiatric conditions rank highest among risk factors for postpartum depression (4). We speculate that this helps to explain the relationship between lower rates of pre-pregnancy psychiatric medication and higher rates of positive brief screens among black patients.

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Descriptive Analysis of 13 Patients Suffering from Cognitive and Psychiatric Sequelae of Severe COVID-19 Illness



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Introduction: COVID-19 infection has been associated with several long-term negative physical and neuropsychiatric outcomes including fatigue, dyspnea, insomnia, pain, cognitive issues, anxiety, and depression in up to 75% patients with history of severe illness at 6-month follow-up.

The large number of COVID-19 cases at the University of Colorado hospital (UCH) and difficulty evaluating patients during hospitalization highlighted the need for ongoing psychiatric support. Since July 2020, the Psychiatric Consultation for the Medically Complex (PCMC) clinic has evaluated 13 patients with neuropsychiatric sequelae following hospitalization for severe COVID-19.

Methods: Patients were referred from the UCH Post-ICU clinic or identified via phone outreach program. Psychiatric evaluation was scheduled if patients endorsed significant impact of neuropsych symptoms related to recent COVID-19 infection. Evaluations consisted of traditional psychiatric interviews and structured screening tools including MoCA and HADS.

Results: The PCMC clinic evaluated 13 patients between July and January. 7/13 were female with median age of 47 (range 28-72). Most patients experienced a complicated hospital course with notable impact on occupational and social functioning following discharge. 0/13 had cognitive concerns prior to infection, though 9/13 patients noted subsequent cognitive symptoms including deficits in short-term memory, word finding, concentration, and complex problem-solving. Of those patients, the majority had MoCA scores >28 with cognitive issues resolving over time. 5/13 patients had no preexisting psychiatric history, while 8/13 had a history of anxiety and depression. Median HADS score was 16 (range 6-21). 3/13 patients reported depressive symptoms largely related to bereavement. 10/13 patients reported worsening anxiety, which in all cases was related to either illness anxiety or trauma of illness and ICU stay. Many patients reported ongoing physical symptoms including dyspnea, pain, fatigue, light-headedness, and headaches.

Discussion: Unfortunately, many infected with the novel coronavirus endorse ongoing physical and neuropsychiatric symptoms long after resolution of acute illness. These patients have become known as "Covid long-haulers" and the impact on their quality of life is substantial. While the above clinic sample size is small, themes arise of illness anxiety, trauma reactions, and subjective cognitive concerns that are not found on traditional cognitive screening tests. While there is hope that vaccinations will significantly reduce severe COVID-19 illness rates, the reality remains that millions across the world have been infected and will require ongoing psychological evaluation and support.

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Ready for the Long Haul: Rapid Creation and Deployment of a Proactive, Modified Collaborative Care Program for COVID-19 Survivors with Behavioral Health Needs



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Background: The COVID-19 pandemic created the opportunity to leverage collaborative care model (CCM) best practices (Unützer, 2012) and a rapidly evolving knowledge base to serve patients with post-infection neuropsychiatric symptoms (Taquet, 2020). Expanding the team-based framework of the CCM to incorporate neuropsychology, health psychology, and proactive screening can help psychiatrists meet the neuropsychiatric needs of COVID-19 survivors in primary care.

Methods: In April 2020, we designed a new CCM intervention through an institutional patient care innovation grant to address the anticipated neuropsychiatric needs of patients impacted by COVID-19. We implemented a modified CCM framework in academic general internal medicine clinics featuring social work care management, psychiatric consultation, and collaborating health psychologists and neuropsychologists. We established additional screening and referral pathways from a post-COVID recovery clinic, COVID-19 test follow-up telephone calls, and post-hospital transition of care encounters.

Results: The investigators screened 3557 post-hospital discharge patients between December 1, 2020 and September 30, 2021. 100 patients screened positive for depression or anxiety symptoms. 38 declined enrollment, 3 were already established with services, and 23 were referred to other services. In total, 25 patients referred from all sources were enrolled in the CCM intervention. Of these 25 patients, 23 had prior COVID-19 infection and 19 had prior history of depression or anxiety. Average time between COVID-19 diagnosis to enrollment was 98.8 days. The most commonly identified disorders were depressive (21) and anxiety disorders (19) followed by cognitive complaints (6) and PTSD (2). 18 patients received medication management and 9 received psychotherapy through the CCM. Among 9 patients with complete symptom measurement data, average PHQ-9 decreased from 13.2 to 6.7 during intervention, and average GAD-7 decreased from 13.4 to 6.0. 3 patients completed neuropsychological testing, and 1 demonstrated objective cognitive impairment.