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## Poster Abstracts

consent to electroconvulsive therapy (ECT) and he was discharged after successful transition to oral agents. His discharge BFCRS score was 8. Treatment with nine sessions of bilateral ECT was eventually administered two months following discharge due to persistent symptoms of catatonia, with patient achieving full resolution and returning to baseline level of functioning.

**Discussion:** Catatonia associated with COVID-19 infection has been described<sup>1,2,3,4</sup> with lorazepam as first line of treatment with mixed results. ECT remains the standard of care for the management of refractory cases<sup>4</sup>, however, it may not be readily available in certain clinical situations. Catatonia in the setting of COVID-19 may be associated with an increase in pro-inflammatory mediators<sup>2</sup> leading to altered GABA-ergic transmission and a hypodopaminergic state. As in more typical presentations, avoiding antipsychotic agents remains an important consideration to prevent the development of malignant catatonia.

**Conclusion:** Consultation-liaison psychiatrists are increasingly managing neuropsychiatric sequelae of COVID-19, including catatonia. Knowing how to readily recognize it and prevent and/or efficiently treat its complications, even when ECT is not available, is imperative. Further research is needed to understand its underlying mechanism and treatment.

### References:

1. Caan M, Lim C, Howard M. A case of catatonia in a man with COVID-19. *Psychosomatics*. 2020;61(5):556-560
2. Gouse B, Spears W, Nieves A, et al. Catatonia in a hospitalized patient with COVID-19 and proposed immune-mediated mechanism. *Brain Behav Immun*. 2020;89:529-530
3. Scheiner NS, Smith AK, Wohlleber M, Malone C, Schwartz AC. COVID-19 and Catatonia: A Case Series and Systematic Review of Existing Literature. *J Acad Consult Liaison Psychiatry*. 2021;S2667-2960(21)00077-X
4. Austgen G, Meyers MS, Gordon M, Livingston R. The Use of Electroconvulsive Therapy in Neuropsychiatric Complications of Coronavirus Disease 2019: A Systematic Literature Review and Case Report. *J Acad Consult Liaison Psychiatry*. 2021;S2667-2960(21)00127-0
5. Bush G, Fink M, Francis A, et al. Catatonia. I. Rating scale and standardized examination. *Acta Psychiatrica Scandinavica*. 1996; 93:129-136

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(PO-070) A Case of Takotsubo's Cardiomyopathy and Neuroleptic Malignant Syndrome

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**Background:** Takotsubo's cardiomyopathy (TC) is an acute, stress-induced left ventricular dysfunction that is traditionally associated with physical and emotional stress. We present a case of an individual who developed TC in the setting of neuroleptic malignant syndrome (NMS). Given the significant morbidity and mortality associated with both conditions (Medina de Chazal, 2018; Shalev, 1989), it is essential for clinicians to be aware of such an association.

**Case:** Ms. K is a 64-year-old female with a past psychiatric history of opiate use, borderline personality, and bipolar disorder, a past medical history of hypertension, diastolic heart failure, and hypothyroidism who was admitted for altered mental status, visual hallucinations, and agitation for which she received numerous

psychotropics and eventually developed signs of catatonia, scoring a 30 on the Bush Francis scale (Bush, 1996). She subsequently developed clinical and laboratory findings consistent with NMS. Elevated troponins and concomitant echocardiogram showed findings suggestive of TC. During her hospitalization, she underwent ECT with improvement in her symptoms.

**Discussion:** The association between TC and NMS is rare; only two other cases have been reported (Ullah, Waqas et al., 2020; Oomura, 2004). This case also highlights the diagnostic and therapeutic similarities between NMS and malignant catatonia. Both TC and NMS have been found to have higher prevalence in populations with psychiatric disorders, which may be explained by increased usage of psychotropics in NMS, and increased sympathetic sensitivity in psychiatric patients with TC (Medina de Chazal, 2018). The proposed mechanisms underlying NMS include central dopaminergic blockade and increased sympathetic activity leading to dysautonomia. Similarly, TC may be due to excess sympathetic stimulation leading to microvascular spasms and myocardial stunning.

**Conclusion/Implications:** CL psychiatrists should be aware of the similarities in risk factors and pathogenesis between TC and NMS to prevent morbidity and mortality. Further research can elucidate the specific mechanisms for sympathetic sensitivity among psychiatric patients and to risk stratify patients who are more likely to develop NMS with psychotropic drug use.

### References:

1. Medina de Chazal H, Del Buono MG, Keyser-Marcus L, et al. Stress Cardiomyopathy Diagnosis and Treatment. *J Am Coll Cardiol*. 2018; 72(16): p.1955-1971. doi: 10.1016/j.jacc.2018.07.072.
2. Shalev A, Hermesh H, Munitz H. Mortality from neuroleptic malignant syndrome. *J Clin Psychiatry*. 1989 Jan;50(1):18-25. PMID: 2562951.
3. Ullah, Waqas et al. "A rare association of Takotsubo cardiomyopathy with neuroleptic malignant syndrome." *Journal of community hospital internal medicine perspectives* vol. 10,2 133-137. 21 May. 2020, doi:10.1080/20009666.2020.1742522
4. Reversible cardiomyopathy as the autonomic involvement of neuroleptic malignant syndrome. Oomura M, Terai T, Sueyoshi K, Shigeno K *Intern Med*. 2004 Dec; 43(12):1162-5.
5. Bush G, Fink M, Petrides G, Dowling F, Francis A. Catatonia. I. Rating scale and standardized examination. *Acta Psychiatr Scand*. 1996;93(2):129-136

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(PO-071) A Group Psychotherapy for Patients with Post-Acute Sequelae of COVID-19 (PASC) Experiencing Psychological Stress

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**Background:** Patients with COVID-19 infection are vulnerable to many varied long-term effects that can negatively impact health and overall well-being.<sup>1,2</sup> Group psychotherapies have successfully been applied in various medical illnesses that impose financial, social, and psychological burden.<sup>3</sup> Current literature does not describe a group psychotherapy approach for patients with post-acute sequelae of COVID-19 (PASC). Here, we present a group therapy aiming to assist patients in processing psychological correlates of PASC as an adjunct to their medical care.

**Case:** We developed a weekly open-structured online group therapy facilitated by two resident psychiatrists utilizing supportive



techniques. Inclusion criteria were patients with a medium-high psychosocial baseline who were negatively impacted by documented or suspected COVID-19 infection and suffering psychological stress. Participants were recruited via hospital referral networks and included following a phone call screening with one of the therapists. Group therapy focused on several predominant themes in the PASC recovery process.

**Discussion:** The group identity was shaped by a common experience of poorly understood COVID-19 complications and long-term effects impacting physical and psychosocial function. Due to alienation in the form of invalidation and lack of understanding in the medical community, the group's shared suffering created a secure environment for catharsis. The therapeutic themes consisted of envy of those with mild or asymptomatic COVID-19 recovery, disruption of attachments, identity diffusion as it relates to chronic illness, lack of faith in conventional medicine, information sharing of possible treatments, coping with uncertainty, and hope in the face of suffering. Participants demonstrated a wide range of psychological responses akin to grief<sup>4</sup>, formulated as the process of grieving their prior healthy selves. The large range of the participants' type and severity of affected functioning was harnessed by the group facilitators as a way to explore transference reactions. Common reasons for dropout were financial burden, poor distress tolerance, and progression in achieving goals of adaptation and identity consolidation. Participants with greater impact on daily functioning, difficulty adapting to loss of function, and ongoing identity diffusion were interpreted to likely benefit from ongoing group therapy. Overall, patients reported significant subjective benefit from the sense of belonging and acceptance and the opportunity for accountability to the group.

**Conclusion:** Patients with PASC experience psychological challenges that may be mitigated by group psychotherapy. Further research is needed to evaluate the impact this intervention may have on psychological endpoints.

**References:**

1. Davis HE, Assaf GS, McCorkell L, et al. Characterizing long COVID in an international cohort: 7 months of symptoms and their impact. *EclinicalMedicine*. 2021;38:101019. doi:10.1016/j.eclinm.2021.101019.
2. Lopez-Leon S, Wegman-Ostrosky T, Perelman C, et al. More than 50 long-term effects of COVID-19: a systematic review and meta-analysis. *Sci Rep*. 2021;11(1):16144. Published 2021 Aug 9. doi:10.1038/s41598-021-95565-8.
3. Leszcz, M. Group Therapy for Patients With Medical Illness. *American Journal of Psychotherapy*. 2020;73(4):131-136.
4. O'Connor MF. Grief: A Brief History of Research on How Body, Mind, and Brain Adapt. *Psychosomatic Medicine*. 2019;81(8):731-738.

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(PO-072) A Head-scratching Case of Excoriation Disorder

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**Background/Objective:** Excoriation disorder is characterized by recurrent skin picking leading to other medical and psychological problems. We present an extreme case of excoriation disorder and the challenges associated with its management.

**Case:** A 39-year-old female with active tobacco use and remote stimulant and opioid use presented to our emergency department with a headache. She had been seen three years ago for a 10cm x 8cm circular, well-circumscribed scalp wound extending down to the skull, but had left against medical advice after being recommended psychiatric care for excoriation. MRI during current admission showed a large area of cerebritis with surrounding vasogenic edema in the left parietal and occipital lobes, fungating dysplastic parenchyma through left frontoparietal craniectomy defect, a midline shift of 7-8mm and no evidence of osteomyelitis. She was admitted to neurosurgery for removal of herniated brain, washout of brain abscess and complex flap closure by plastic surgery. The patient admitted to scratching her posterior scalp for three years due to itching, with continuation of picking during sleep. She denied any substance use in 3 years, and had been successfully maintained on methadone. She was fitted with an orthotic helmet and mittens which helped to decrease her scratching at night. She declined psychotropic medications, but agreed to psychotherapy. Three weeks after discharge, she returned with wound leakage, which required placement of a lumbar drain. She was found to have new erosions at the wound, despite the use of a helmet and frequent care. Nicotine replacement was stopped to facilitate wound healing, but this precipitated nicotine withdrawal and exacerbated compulsive picking. Patient initially declined medical treatment when offered by psychiatry, however accepted escitalopram offered by neurosurgery.

**Discussion:** Excoriation disorder has been found to be a relatively common, yet under-recognized disorder<sup>1</sup>. There is a report of a patient with obsessive compulsive disorder using an instrument to traverse their frontal bone<sup>2</sup>, but the progression of excoriation to a brain abscess, with further wound health being jeopardized by picking is rare.

**Conclusion:** This case highlights the risk of life-threatening complications with excoriation. It is important for CL psychiatrists to understand stigma against psychiatric explanations in compulsive disorders, and the importance of interdisciplinary approaches which make treatment with psychotropics more acceptable to patients.

**References:**

1. Grant, J. E., & Chamberlain, S. R. (2020). Prevalence of skin picking (excoriation) disorder. *Journal of psychiatric research*, 130, 57-60. doi: 10.1016/j.jpsychires.2020.06.033
2. Galdyn, I. A., Chidester, J. & Martin, M. C. (2015). The Reconstructive Challenges and Approach to Patients With Excoriation Disorder. *Journal of Craniofacial Surgery*, 26(3), 824-825. doi: 10.1097/SCS.0000000000001514.

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(PO-075) A Review of Alternative Health Interventions in the Treatment of Perinatal Depression

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**Background:** Perinatal depression (PD) is a mood disorder that lasts from the onset of pregnancy and up to 1 year postpartum [1], affecting 10 to 20% of women during pregnancy [2]. PD is not always detected, leading to increased maternal morbidity and mortality. PD has been linked to increased risk for substance use disorders and suicide ,the latter being the leading cause of maternal death within 1 year postpartum [6]. Although antidepressant treatment and psychotherapies are well established, more women are now seeking alternative