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#### **Title**

Rare Disease Masked Behind Common Presentation: Toxic Leukoencephalopathy Up Close

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families responded to the telephone survey. Respondents were more likely to have a child who was female and slightly younger compared to non-respondents. 98% of respondents reported some virtual schooling for their child, with 77% reporting virtual schooling for the majority of the three months prior to their child, first hospital admission. 61% indicated their child was exclusively in virtual school. No significant relationships were observed between virtual schooling and any outcome measures relating to mental health.

**Conclusions:** Pediatric mental health emergencies and hospitalizations have grown and evolved since the start of the COVID-19 pandemic. This study characterizes some of the changes in patient demographics and experience with virtual schooling prior to and following the pandemic. Our results do not support any correlation between virtual schooling and mental illness requiring emergent care or hospitalization. However, this study has many significant limitations. Respondents were not representative of all admitted patients, and survey data were gathered for only one-third of families whose children were admitted at one site. Very few respondents remained in school in person throughout the pandemic, complicating efforts to make meaningful comparisons. Future work should attempt to capture a broader subject pool and obtain prospective data regarding the effects of school modality on mental health.

## 8 The Utility of the Columbia-Suicide Severity Rating Scale in Determining a Patient, Imminent Risk for Suicide in the Emergency Department

*Adam Takatsuka, Trevor Nykamp, Wesley Speer, Savannah Benko, Jacob Bart, Paris St Clair, Kirk Harris, Kirk McCall, Pooja Agarwal, Corey Goldstein, Eitan Kimchi*

**Background:** In response to a 2019 Joint Commission report highlighting new suicide screening requirements, many hospitals have initiated universal screens for suicidal ideation for all patients. A common algorithm is to screen patients upon their entrance to a hospital with a tool such as the Columbia-Suicide Severity Rating Scale (C-SSRS). When a patient enters our institution, Emergency Department (ED), they are screened by a Registered Nurse (RN), who is either a psychiatric RN or a non-psychiatric ED RN, with the C-SSRS to assess their level of imminent risk for suicide. Patients scoring a 4 or 5 on the C-SSRS are considered high-risk, and one-to-one constant visual observation via a safety assistant is automatically assigned. All of these patients must then be formally assessed by the psychiatric consultation team, who then recommend whether to continue or discontinue the safety assistant. Existing literature on the C-SSRS measures either chronic risk over time (six months) or evaluates patients already admitted to an inpatient psychiatric unit, thereby selecting for an already

known high-risk population. There is limited data on the validity of the C-SSRS in determining a patient, imminent risk for suicide upon presentation to the ED. Assignments of safety assistants may impose a psychological toll upon patients due to the resulting infringement upon the patient, independence and privacy, and this toll may sometimes result in further acute psychiatric decompensation. In addition, safety assistants are a limited resource, and their overutilization may present a financial and personnel concern for hospitals. It is thus pertinent for hospitals to assign safety assistants judiciously.

**Objective:** To evaluate the utility of the C-SSRS in assessing a patient, imminent risk for suicide compared to a psychiatrist, evaluation, and to determine whether the C-SSRS more accurately assesses imminent risk for suicide when administered by a psychiatric RN as opposed to a non-psychiatric ED RN.

**Method:** We examined patient encounters for which a safety assistant was ordered for suicidality based on a C-SSRS score of 4 or 5 (n = 164). For each encounter, we recorded the psychiatry team, recommendation for continuation or discontinuation of the safety assistant, title of the RN who administered the C-SSRS, and total duration of the safety assistant assignment. Data was analyzed via a multivariate logistic regression analysis.

**Results:** The psychiatry team aligned with the C-SSRS in assessing a patient as high-risk for imminent suicide in the ED 22.6% of the time. Administration of the C-SSRS by a psychiatric RN was not associated with increased C-SSRS accuracy in capturing high-risk patients compared to administration by a non-psychiatric ED RN. The average duration of unnecessary safety assistant assignments was 6.8 hours.

**Conclusion:** The data supports that the C-SSRS is of limited utility when determining a patient to be of high-risk for imminent suicide in the ED and may result in prolonged care due to unnecessary assignments of safety assistants. We propose that the C-SSRS should not be relied upon as the sole method for assessment of risk for imminent suicide in the ED.

## 9 Rare Disease Masked Behind Common Presentation: Toxic Leukoencephalopathy Up Close

*Benjamin T. McMahon, Nicole Dumont*

Toxic leukoencephalopathy refers to a structural alteration of the white matter, generally affecting myelinated structures. It is caused by environmental toxins, substance use, or chemotherapeutic agents. The clinical presentation is extremely variable, ranging from minor cognitive impairment to severe neurologic dysfunction, and is often mistaken for primary psychiatric illness. A 51-year-old man presented involuntarily to the ED for bizarre behavior and disordered mentation. His initial cognitive evaluation showed orientation to person but neither place nor time. He was unable to state how he arrived

at the hospital and where he was earlier in the day. After initial evaluation it became clear he had no recollection of the past 3 months. On chart review, the patient previously presented to a separate hospital two weeks prior with admission for sepsis, rhabdomyolysis, acute renal failure requiring HD, and brachial plexus injury. Prior to that admission, he was found down at home after ingesting cocaine and MDMA. Notably, staff at that facility reported he was in clear mentation and had no signs of memory loss or confusion prior to discharge. Further discussion at the current ED visit resulted in a staff member stating the patient recognized the term schizophrenia and the patient agreed that he had been previously diagnosed. He was admitted to the inpatient psychiatric unit for further evaluation of an acute schizophrenia exacerbation. He was unable to provide collateral nor did he have any recollection of prior hospitalizations, including the recent admission two weeks prior. His MoCA on admission was 8/30. Upon discussion over the next few days, the patient expressed frustration at his memory loss but was able to say his last well-formed memory was finding some cocaine in a house I was cleaning and using it. Initial CT without contrast showed no evidence of acute territorial infarct, intracranial hemorrhage, or mass lesion. MRI showed diffuse and heterogenous hyperintensities throughout the white matter in both cerebral hemispheres. This finding raised suspicion for a toxic component to the patient's memory loss. He received an extensive medical workup evaluating metabolic and clinical manifestations of toxic leukoencephalopathy. Over the course of one week, he showed slight improvement in memory and cognition. His MoCA improved to and peaked at 14/30. As mentation improved, he denied any previous psychiatric illness and did not recall stating he has schizophrenia. At this time, he is continuing to be evaluated for mild clinical improvement and counseled on a new baseline for memory retention and cognition in the setting of delayed toxic leukoencephalopathy due to substance use. This case illustrates the benefit in an expanded differential diagnosis in the setting of confusion and bizarre behavior. Although toxic leukoencephalopathy is rare and the understanding of pathophysiology is incomplete, its prominence is expanding in a society with increasing access to severely leukotoxic agents.

## 10 Risk Assessment Clinical Pathway

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A comprehensive risk assessment should encompass suicide and violence risk factors, protective factors, and mitigating factors to help determine the level of risk and subsequently drive clinical care to arrive at a safe treatment plan. The psychiatric emergency setting requires a thoughtful suicide and violence risk assessment by the clinical team. Using a variety of published resources coupled with input from the clinical team (psychiatrists,

nurses, social services), a suicide and violence risk assessment tool was created in the Electronic Health Record (EHR) for implementation across all treatment settings to be used by any clinically trained staff (psychiatrists, nurses, social services). Depending on the risk assessment findings, clinical staff is then able to determine the next steps in the clinical pathway to best support the patient, treatment plan with specific focus on least restrictive interventions. There are several benefits to establishing a risk assessment clinical care pathway. First and foremost, the patient is not subjected to unnecessary hospitalization(s) that can be traumatic and overall damaging to his/her treatment. The risk assessment accounts for all contributing factors along with protective and mitigating factors to provide the best care for that patient at that moment in time. Next steps involve assessing the level of acute and chronic risk (ie. Low, moderate, high) to determine the clinical care formulation. High risk levels and/or Red flags require an enhanced response that may involve considering emergency evaluation for psychiatric hospitalization. However, the risk formulation for low and moderate results may involve performing safety plans, psychoeducation, outpatient therapy, and/or more intensive monitoring with Intensive Outpatient Programs (IOP) or Partial Hospitalization options. The risk assessment yielding chronic risk levels focuses on long term treatment options to work on suicide focused strategies, engage the patient in treatment, and providing a variety of resources to support that patient. Moreover, a standardized risk assessment tool and clinical care pathway can trigger a therapeutic and individualized response to patients presenting in crisis focusing on the recovery model. By making this tool and clinical pathway available to all clinical team members (ie. Psychiatrists, nurses, social services), more patients can be served with appropriate determinations on the next level of care. In addition, standardizing the risk assessment and clinical care pathway provides consistent reliable care that aligns with Safe, Timely, Effective, Efficient, Equitable, Patient-centered (STEEEP) principles. While the psychiatric emergency setting is one touchpoint along the continuum of care, the risk assessment and clinical pathway is applicable to any clinical setting (ie. Primary care, OB/Gyn, etc.) when indicated. Lastly, evaluation of the systems of care available at the community level opens up a vast array of resources available for patients that can have a positive impact on patient outcomes, population health, and reduction in healthcare costs.

## 11 Comparison of Emergency Department 14-Day Recidivism Rates in Emergency Behavioral Health Patients: EmPath Versus Standard ED Care

*Austin MacKenzie, Craig Bilbrey, Stephanie Mullennix*

**Introduction:** Emergency Psychiatric Assessment, Treatment, and Healing (EmPATH) units are an emerging and