10-2022

Post COVID-19 Infection Multisystem Inflammatory Syndrome in Adults Presenting with Pain, Ascending Weakness, and Paresthesias: A Case Report

Dustin Sielski
Beaumont Health Resident

Jesse Lou
Beaumont Health Resident

Timothy Bazil
Beaumont Health Resident

Lisa Grant
Beaumont Health

Recommended Citation

Sielski D, Lou J, Bazil T, Grant L. Post COVID-19 infection multisystem inflammatory syndrome in adults presenting with pain, ascending weakness, and paresthesias: a case report. PM&R. 2022 Oct;14(S1):116.

indications. Most TEAEs were mild to moderate in intensity, and only one subject experienced a TR-SAE. Few TEAEs led to discontinuation; there were no fatal TEAEs in subjects receiving INCO. Repeated cycles did not increase the incidences of any TEAE category. The most frequent TEAEs and TR-TEAEs were indication-dependent, but often included nasopharyngitis, diarrhea and headache; TR-TEAEs generally included dysphagia for indications affecting the head or neck. TR-AESIs across all indications were most commonly muscular weakness and dry mouth. Few subjects developed NAb; the vast majority of those were positive at baseline and previously treated with other botulinum toxins.

Conclusions: Results of this pooled analysis support and extend the favorable safety and tolerability profile of INCO for the treatment of adult movement disorders and sialorrhea.

Level of Evidence: Level III

Post COVID-19 Infection Multisystem Inflammatory Syndrome in Adults Presenting with Pain, Ascending Weakness, and Paresthesias: A Case Report

Dustin Sielski, MD (Beaumont Health (Royal Oak) PM&R Program, Royal Oak, Michigan, United States); Jesse Lou, MD; Timothy G. Bazil, DO; Lisa Grant, MD

Disclosures: Dustin Sielski, MD: No financial relationships or conflicts of interest

Case Diagnosis: Post COVID-19 infection multisystem inflammatory syndrome in adults presenting in a 28-year-old African American female with pain, ascending weakness, paresthesias, and chest pain.

Case Description or Program Description: Patient with documented COVID-19 infection 5 weeks prior to arrival and presented with pain, paresthesias, and weakness in the bilateral lower extremities. Symptoms began shortly after patient recovered from COVID-19 infection, however, patient developed ascending weakness extending into the hands with left sided chest pain, prompting patient to present for evaluation.

Setting: Major academic and referral center with level 1 adult trauma.

Assessment/Results: Lumbar puncture and cerebrospinal fluid studies were not suggestive of Guillain-Barré syndrome. Imaging of the entire neuraxis was unremarkable. Echocardiogram revealed new onset heart failure with reduced ejection fraction of 35% consistent with non-ischemic cardiomyopathy and cardiac imaging was not suggestive of amyloidosis. EMG was consistent with primarily axonal greater than motor peripheral polyneuropathy. Further inflammatory workup revealed elevated erythrocyte sedimentation rate and C reactive protein. Paraneoplastic workup was unremarkable. Patient was started on intravenous immunoglobulin (IVIG) for suspected Multisystem Inflammatory Syndrome in Adults (MIS-A), however, patient developed infusion reaction shortly after infusion began and IVIG was discontinued pending hemodynamic stability.

Discussion (relevance): Post COVID-19 multisystem inflammatory syndrome is seen more commonly in children than in adults per literature review. Clinicians must be mindful of potential MIS-A in adult patients with symptoms mimicking Guillain-Barré syndrome with negative workup and imaging, especially with concomitant cardiovascular compromise and elevated inflammatory markers. This case demonstrates one of the various presentations documented of MIS–A and is important for accurate diagnosis of this syndrome in the future.

Conclusions: Post COVID-19 patients presenting with symptoms similar to Guillain-Barré syndrome with negative workup should be evaluated for MIS-A as this syndrome can affect multiple organ systems simultaneously, such as the nervous system and cardiovascular system as seen in this patient.

Level of Evidence: Level V

Predictors of One Year Pressure Injury Outcomes in Hospitalized Spinal Cord Injured Veterans with Stage 3 or 4 Pressure Injuries

Patricia T. Champagne, MS; Yi-Ting Tzen; Jijia Wang; Wei-Han Tan

Background and/or Objectives: To investigate predictors of wound outcomes at 1 year of discharge of Veterans with spinal cord injury (SCI) hospitalized with one stage 3 or 4 pelvic pressure injury (PI).

Design: Retrospective medical record review between 1/1/2013-12/31/2018.

Setting: A VA HealthCare System SCI unit.

Participants: Veterans with SCI admitted with one stage 3 or 4 pelvic PI. Traumatic and atraumatic SCI patients treated medically without flap surgery were included.

Interventions: Wound care

Main Outcome Measures: Wound status at one year of discharge. A logistic model was built to select the significant predictors of wound healing outcomes. The area under the curve (AUC) was calculated using the leave-one-out cross validation method. $P < 0.05$ was considered statistically significant.

Results: A total of 62 hospitalizations were included for analyses: 33 healed, and 29 non-healed wounds. Three significant predictors of non-healed wound outcomes include: pressure mapping protocol during hospitalization, wound depth, and usage of alginates dressings. Two significant predictors of healed wound