

Dr. William Rene Plaza Solorzano

Pediatric Long-COVID with urinary and GI disorders | 21/04/2024

Patient Summary

The patient is a 14-year-old female who has experienced various symptoms since 2021:

- In October 2021 she had sudden onset abdominal pain and a fever, went to the ER and despite minimal respiratory symptoms was found to have a right lung abscess with a negative PCR testing for COVID at the time.
- The abscess was treated and resolved, however the abdominal pain persisted and has since become chronic left sided abdominal pain. A full workup of MRI, colonoscopy, US, MRE, and labs was negative for any gastrointestinal abnormalities.
- Concurrently to the abdominal pain she has had fatigue and intolerance to exertion.
- In the last nine months she has also developed urinary incontinence on a daily basis, occurring several times a day. A recent consultation with a urologist suggested the possibility of these symptoms being associated with long COVID.

Research Inquiry

Who are the leading pediatric experts in long COVID in Canada and the US for patients with urinary and gastrointestinal disorders?

Important Note

Neither the services nor the research report constitute medical advice of any kind and are not intended to be a substitute for professional medical advice.

Meta Medical Findings

During our thorough investigation to identify relevant specialists in urology, gastroenterology, and gynecology specializing in Long-COVID-associated symptoms, such as abdominal pain and urinary incontinence, we were unable to locate physicians with exclusive specialization in this field in North America. Nevertheless, we have identified several multidisciplinary centers adept at managing children with Long-COVID. Additionally, we have furnished details regarding pediatricians specializing in Long-COVID more broadly. Should further assistance be required, we can provide a report featuring leading pediatric urologists, gastroenterologists, neurologists, and neurophysiologists specializing in the described conditions, independently of Long-COVID.

Pediatric long COVID centers





- Boston Children's Hospital is ranked as one of the top hospitals for children in the USA.
- After the initial screening meeting with the child and parents, each patient is allocated to a particular team according to their distinct symptoms.
- Address: Children's Hospital, 300 Longwood Ave, Boston, MA 02115, United States.

2. Children's Hospital Los Angeles (CHLA)





- CHLA holds a prestigious position among the top 10 children's hospitals in the USA, with its Urology department specifically ranked at #6 in <u>U.S. News rankings</u>.
- The CHLA Long Covid Recovery Care Program comprises experts in the field of infectious diseases who have made significant contributions to research in the field and possess decades of experience. Within this team of specialists, a multidisciplinary approach is adopted for each patient, ensuring tailored medical interventions suited to their individual needs.
- Address: Division of Infectious Diseases, 4650 Sunset Blvd, Los Angeles, CA 90027, United States.

3. Pediatric Post-Covid-19 Rehabilitation Clinic

Kennedy Krieger Institute

- The Kennedy Krieger Institute has created the Pediatric Post-COVID-19 Rehabilitation Clinic, for children and adolescents who have recovered from COVID-19 but need additional support to regain lost neurological and physical functioning as a result of the illness.
- Dr. Laura A. Malone leads the clinic as its head, bringing her expertise as a pediatric neurologist specializing in researching factors and treatments that facilitate neurological recovery in children's illnesses.

Her focus extends to examining the clinical phenotypes of children experiencing persistent symptoms post-SARS-CoV-2 infection and investigating the factors and mechanisms contributing to favorable recovery outcomes.

- The Pediatric Post-COVID-19 Rehabilitation Clinic offers an interdisciplinary team comprising a pediatric neurologist, pediatric rehabilitation expert, and other specialists tailored to meet the needs of each patient. Should a patient present with urinary incontinence stemming from a neurological background, seeking a second opinion from this clinic could be a valuable option.
- Address: Pediatric Post-Covid-19 Rehabilitation clinic, 707 North Broadway, Baltimore, MD 21205, United States.

4. Centers recommended by the Long Covid Families Foundation



- The Long Covid Families Foundation is a patient-centered organization dedicated to assisting patients and their families in navigating the challenges of diagnosis, treatment, and daily management of the symptoms.
- Long Covid Families has requested caregivers to share the names of any doctors who have been effective in treating Long Covid symptoms in children - <u>Caregiver recommended doctors</u>
- Additionally, they have compiled a comprehensive list of all current Long Covid clinics in the United States that provide treatment for children:

Center name	Location	Website
Yale New Haven Children's Post-COVID Comprehensive Care Program	Connecticut	https://www.ynhh.org/childrens-hospital/services/p ulmonology/post-covid-care-program
Children's Hospital Los Angeles Long COVID Recovery Care	California	https://www.chla.org/long-covid-recovery-care
COVID-19 Assessment Program (CAP)	Colorado	National Jewish Health for Kids COVID-19 Assessment Program
Norton Healthcare COVID-19 Long-Term Care Clinic at Novak Center for Children's Health	Kentucky	https://nortonhealthcare.com/services-and-conditio ns/infectious-disease/services/coronavirus-covid-1 9/long-term-clinic/
Children's Hospital New Orleans	Louisiana	https://www.chnola.org/documents/Covid-Clinic-Ca rd-20-8914.pdf
Kennedy Krieger Institute	Maryland	https://www.kennedykrieger.org/patient-care/cente rs-and-programs/pediatric-post-covid-19-rehabilita tion-clinic
Children's Boston	Massachusetts	https://www.childrenshospital.org/programs/post-c ovid-clinic
Fairview Health Services – Pediatric Covid Clinic	Minnesota	https://mhealthfairview.org/resources/covid19/long- term-covid-care/pediatric-covid-19-clinic
Pediatric Post-COVID CARE Program	New Jersey	https://www.rwjbh.org/saint-barnabas-medical-cent er/treatment-care/covid-recovery/pediatric-covid-r ecovery/
Richmond University Medical Center	New York	https://www.rumcsi.org/services/post-covid-19-car e/
University Hospitals - Rainbow Babies & Children's COVID Recovery Clinic	Ohio	https://www.uhhospitals.org/rainbow/services/pedia tric-infectious-diseases
UTHealth COVID-19 Center of Excellence	Texas	https://www.utphysicians.com/uthealth-covid-19-ce nter-of-excellence/
Children's National Pediatric Post-COVID Program	Washington, D.C.	https://childrensnational.org/departments/post-covi d-program

Long-COVID Leading Pediatricians

1. Peter C Rowe, MD



- Location: Johns Hopkins Children's Center, 1800 Orleans Street Baltimore
- **Summary:** Dr. Peter Rowe is a Professor of Pediatrics at the Johns Hopkins University School of Medicine. He is the inaugural Sunshine Natural Wellbeing Foundation Professor of Chronic Fatigue and Related Disorders and serves as the Director of the Chronic Fatigue Clinic at Johns Hopkins Children's Center.
- **Publications:** 87 publications in the field of pediatric medicine, including several related to long-COVID in this population.

2. Suchitra Rao, MD





- Email: suchitra.rao@cuanschutz.edu | suchitra.rao@gmail.com |
 suchitra.rao@childrenscolorado.org
- Location: Children's Hospital Colorado, Aurora, Colorado,
- **Summary:** Dr. Suchitra Rao is an Associate Professor of Pediatrics at the University of Colorado School of Medicine in the Sections of Infectious Diseases and Hospital Medicine. She is also Associate Medical Director of Infection Control at Children's Hospital Colorado. Her research interests include the epidemiology of respiratory viruses. She has been the principal investigator of several prospective observational studies exploring the burden of disease of influenza in children.
- She is part of the <u>RECOVER</u> initiative, which seeks to understand, treat, and prevent Post-Acute Sequelae of SARS-CoV-2 (PASC).
- **Publications:** Over 100 publications in the field of virology among children, with almost 20 related to post-COVID.

<u>Appendix A - Literature on urinary incontinence as a facet of long</u> <u>COVID manifestation:</u>

- <u>COVID-19-Induced Bladder and Bowel Incontinence: A Hidden Morbidity?</u> Case series¹ of 5 patients presenting with new-onset urinary and/or fecal incontinence following COVID-19 infection. Two of the patients had urinary incontinence only, 1 had fecal incontinence only, and 2 had both. Two of the patients referred for fecal incontinence disclosed symptoms of urinary incontinence on direct questioning only. In all patients, there appears to be spontaneous improvement of symptoms with only 1 complete resolution during follow-up.
- 2. Post-COVID-19 Demyelinating Disease and Its Effect on the Lower Urinary <u>Tract: A Rare Case of a 14-Year-Old Man</u> - A case report² of a 14-year-old patient who developed severe lower urinary tract symptoms following a COVID-19 infection, leading to a demyelinating disease affecting the lower urinary tract. The patient was managed successfully with specialized neuro-urological care, highlighting the importance of multidisciplinary collaboration in managing post-COVID-19 complications.

References

- Emordi V, Lo A, Bisharat M, Malakounides G. COVID-19-Induced Bladder and Bowel Incontinence: A Hidden Morbidity? *Clinical pediatrics*. 2023;63(1):10-13. doi:https://doi.org/10.1177/00099228231167844
- Ioannis Tsikopoulos, Antoniadis G, Konstantinidis C, Michalis Samarinas. Post-COVID-19 Demyelinating Disease and Its Effect on the Lower Urinary Tract: A Rare Case of a 14-Year-Old Man. *Curēus*. Published online November 18, 2023. doi:https://doi.org/10.7759/cureus.4902