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Telemedicine for Pediatric Inflammatory Bowel Disease in the Era of COVID-19.

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After 1 month, pruritus disappeared and sBA normalized (4.6  $\mu mol/L$ ). Follow-up at 3 and 8 months confirmed the absence of pruritus and cholestasis (sBA: 1.9 and 5  $\mu mol/L$ ). Serum liver tests, alpha-fetoprotein level, and liver elastography value (Supersonic Shear Imaging: 6 kPa) were normal. This report shows that in our PFIC2 patient GPB is as efficient as PBA to improve pruritus and cholestasis and allows good oral tolerance and therapeutic adherence.

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#### **REFERENCES**

- Gonzales E, Grosse B, Schuller B, et al. Targeted pharmacotherapy in progressive familial intrahepatic cholestasis type 2: evidence for improvement of cholestasis with 4-phenylbutyrate. *Hepatology* 2015;62: 558–66.
- Naoi S, Hayashi H, Inoue T, et al. Improved liver function and relieved pruritus after 4-phenylbutyrate therapy in a patient with progressive familial intrahepatic cholestasis type 2. J Pediatr 2014;164:1219.e3– 27.e3.
- Shchelochkov OA, Dickinson K, Scharschmidt BF, et al. Barriers to drug adherence in the treatment of urea cycle disorders: assessment of patient, caregiver and provider perspectives. Mol Genet Metab Rep 2016;8:43–7.
- Shneider BL, Morris A, Vockley J. Possible phenylacetate hepatotoxicity during 4-phenylbutyrate therapy of Byler disease. *J Pediatr Gastroenterol Nutr* 2016;62:424–8.
- https://www.ema.europa.eu/en/documents/assessment-report/ravictiepar-public-assessment-report\_en.pdf. Committee for Medicinal Products for Human Use (CHMP). September 24, 2015; EMA/676925/2015.
- Monteleone JP, Mokhtarani M, Diaz GA, et al. Population pharmacokinetic modeling and dosing simulations of nitrogen-scavenging compounds: disposition of glycerol phenylbutyrate and sodium phenylbutyrate in adult and pediatric patients with urea cycle disorders. J Clin Pharmacol 2013;53:699-710.

# Telemedicine for Pediatric Inflammatory Bowel Disease in the Era of COVID-19

To the Editor: Telehealth is a widely adopted solution to maintain high-quality care for patients with chronic diseases while lessening the risk of transmission of SARS-CoV19 (1,2).

We would like to share our experience in expanding our telemedicine capability to address the comprehensive care needs for our pediatric inflammatory bowel disease (IBD) population.

Our Pediatric IBD center is located in the Bay Area, one of the earliest adopters of shelter in place. Given an existing telemedicine practice at our institution, we were able to convert appointments in less than a week to 100% telehealth visits. Our primary goals as we implemented our telemedicine program included the following:

- Screen patients before infusion appointments, to keep infusion center safe.
- 2. Telehealth visits with patients receiving home infusion.
- Injection teaching.
- Routine care to our patients with IBD, including multidisciplinary visits (Pediatric Gastroenterologist, Nurse).
  Practitioner, Social Worker, Pediatric Dietician, Interpreter, and other specialists such as Surgery, Rheumatology, Immunology).
- Provide urgent evaluations during flares to minimize emergency room visits and admissions.
- 6. Support ongoing IBD clinical trials.

We instituted a weekly virtual meeting with the care team to review acute issues, disseminate current literature on SARS-CoV-19 and IBD, and navigate limitations in available resources, such as nonurgent procedures. As we rethink our care algorithms to accommodate social distancing, we are also creating alternatives that we hope to continue beyond this pandemic (3).

Despite physical limitations we continue to promptly address questions, coordinate complex care, and triage clinical needs while enabling patients to stay at home, helping to reduce the spread of the virus to mass populations and the medical staff on the frontline.

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#### **REFERENCES**

- Smith AC, Thomas E, Snoswell CL, et al. Telehealth for global emergencies: implications for coronavirus disease 2019 (COVID-19). J Telemed Telecare 2020. [Epub ahead of print].
- 2. Stone JM, Gibbons TE. Telemedicine in pediatric gastroenterology: an overview of utility. *Telemed J E Health* 2018;24:577–81.
- Mehrotra A, Ray K, Brockmeyer DM, et al. Rapidly converting to "virtual practices": outpatient care in the era of Covid-19. NEJM Catalyst 2020.

## Heightened Central Line-associated Blood Stream Infection Risk During a Pandemic

To the Editor: We wish to update the pediatric gastroenterology community on a critical issue for children with intestinal failure (IF) that threatens to increase emergency department visits and hospitalizations during the pandemic related to

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