

DEVELOPMENT AND INITIAL RESULTS OF THE INTERNATIONAL MULTI-CENTRE PAEDIATRIC PORTAL HYPERTENSION REGISTRY (IMPPHR)

Tassos Grammatikopoulos¹, Julio Pimenta², Simon Ling³, Catalina Jaramillo⁴, Jean Molleston⁵, Oanez Ackermann⁶, Serpil Tutan⁷, Saima Deen⁷, Uma Ramamurthy⁷, Jordache Ellis⁸, Alexandre Ferreira², Rustam Yuldashev⁹, Riccardo Superina¹⁰, Mathieu Duche⁶, Jaime Bosch¹¹, Roberto De Franchis¹², Benjamin Shneider¹³

¹Paediatric Liver, Gi And Nutrition Centre, King's College Hospital NHS Foundation Trust, LONDON, United Kingdom, ²Pediatrics, Hospital das Clínicas/UFMG, Belo Horizonte, Brazil, ³Division Of Gastroenterology, Hepatology And Nutrition, The hospital for sick children, Toronto, Canada, ⁴Pediatrics, University of Utah, Salt Lake City, United States of America, ⁵Pediatrics, Indiana University, Indianapolis, United States of America, ⁶Hepatologie Et Transplantation Hepatique Pediatriques, Hopital Bicetre, Le Kremlin-Bicetre, France, ⁷Pediatrics, Baylor College of Medicine, Houston, United States of America, ⁸Pediatrics, Kings College Hospital, London, United Kingdom, ⁹Pediatric Surgery, Republican Specialized Scientific Practical Medical Center of Pediatrics, Tashkent, Uzbekistan, ¹⁰Pediatric Surgery, Lurie Children's Hospital, Chicago, United States of America, ¹¹Department Of Visceral Surgery And Medicine, University of Bern, Bern, Switzerland, ¹²Department Of Biomedical And Clinical Sciences, University of Milan, Milan, Italy, ¹³Pediatric Gastroenterology, Hepatology And Nutrition, Baylor College of Medicine/Texas Children's Hospital, Houston, United States of America

Objectives and Study: Due to limited data, the management of variceal hemorrhage (VH) is controversial in paediatrics. IMPPHR aims to derive large-scale international data informing management of VH.

Methods: The major foci of IMPPHR's retrospective data collection are, 1) morbidity and mortality of first VH, 2) feasibility of primary prophylaxis of VH, 3) approaches to secondary prophylaxis. Each centre provides characteristics and clinical activity accrued between 1/1/18 and 31/12/19. Potential subjects are children with first VH or primary endoscopic prophylaxis between 1/7/12 and 30/6/17 with follow up until 30/6/20.

Results: As of 30/11/22, of the > 50 centres expressing interest, 7 centres (median population 6M) located in 5 countries on 4 continents have entered centre-specific and patient level data (n=136). Centre characteristics and 2-year activity include (median:25%-75%ile): hospital beds (289:76-354), ICU beds (32:16-42), interventional radiologists (4:2-5), OLT (34:7-80), LRD OLT (0:0-10), mesorex bypass (1:0-6), variceal ligation sessions (22:18-25), sclerotherapy sessions (4:2-45). 71 patients entered for 1st VH (biliary atresia-19, EHPVO-30, eleven miscellaneous diagnoses-22) undergoing ligation-41, sclerotherapy-17, no endoscopic intervention-6 (7 unknown). 65 entered for primary prophylaxis (EHPVO-16, biliary atresia-14, autoimmune hepatitis-7, CHF/ARPKD-5, CF-5, PSC-4, eight miscellaneous diagnoses-14) undergoing ligation-52, sclerotherapy-4 or both-2 (7 unknown). Variceal eradication was accomplished in 52% after 1st VH (4.0:2-6 sessions) and 62% undergoing primary prophylaxis (4.0:3.0-5.5 sessions). 6 underwent mesorex bypass and 6 portosystemic shunting (5 EHPVO) during follow-up. Status at final follow-up for 1stVH and primary prophylaxis was alive with native liver (57 and 65%), OLT (30 and 33%), died (11 and 2%, including 2 (2.8%) within 6 weeks of 1st VH).

Conclusions: IMPPHR is feasible and generated novel preliminary data – the target of > 1000 cases will provide critical information guiding clinicians caring for children with portal hypertension. Supported by the Spain Family and an ESPGHAN Networking Grant.

Contact e-mail address: Benjamin.Shneider@bcm.edu