

Wireless capsule endoscopy, an accurate minimally invasive technology for the evaluation of esophageal varices in pediatrics: Preliminary results from a French study

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Portal hypertension is a hemodynamic abnormality associated with a high risk of bleeding from gastroesophageal varices. Esophagogastroduodenoscopy (EGD) is considered the most effective method to investigate esophageal varices (EV). But this costly procedure has to be performed under sedation and is often unpleasant for the pediatric patients. Esophageal capsule endoscopy (ECE) is a minimally invasive method and a promising alternative but until today very few reports have described the benefits of this technique in pediatrics. The main objective of our multicenter prospective study was to estimate the accuracy of the ECE for the detection/diagnosis of EV in children presenting with portal hypertension. From October 2011 to December 2012, a total of 23 patients (15 boys; median age 15.8 [11.3; 17.6]) presenting with portal hypertension who underwent a wireless capsule endoscopy followed by EGD, were enrolled in two of the seven centers participating in this study. In France fourteen patients presented EV and three of them were unable to swallow the capsule. No adverse event was experienced by anyone subjected to the two methods and all the patients estimated that, with respect to comfort they preferred the ECE to the EGD procedure. Sensitivity, specificity, negative and positive predictive values of ECE for the detection of esophageal varices were 85%, 86%, 75% and 92%, respectively. These preliminary results confirm an acceptable accuracy of ECE in the diagnosis of EV and support the ECE as an alternative to EGD for the evaluation of the esophageal varices in children.

Biography

Lioara Restier-Miron has completed her Ph.D. in 2007 from University Lyon 1, France. After a post-doctoral training at the University of Utah, she joined the University Hospital of Lyon in clinical research in 2008. Since 2009, she has directed clinical research in the Pediatric Hepatology, Gastroenterology and Nutrition Department. Her current research interests are focused on the diagnosis and the control of liver disease and inflammatory bowel disease. Dr. Restier-Miron has published several papers in peer-reviewed journals and presented her research findings in national and international meetings in Europe and USA.

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