

## Joint Symposium 22

Paediatric Committee / European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN)

Friday, October 30, 09:00-10:30

### Session Title

**Nuclear Medicine Techniques in the Evaluation of GI Motility in Children**

### Chairperson

Lorenzo Biassoni (London, United Kingdom)

### Programme

- 09:00 - 09:22 Michiel Van Wijk (Amsterdam, Netherlands / ESPGHAN): Clinical Scenarios of GI Motility Disorders in Children
- 09:22 - 09:44 Ania Rybak (London, United Kingdom / ESPGHAN): Non-Imaging Techniques in the Evaluation of GI Motility in Children
- 09:44 - 10:06 Zvi Bar-Sever (Petach-Tikva, Israel): Gastric Emptying Scintigraphy
- 10:06 - 10:28 Lorenzo Biassoni (London, United Kingdom): Nuclear Medicine Techniques in Intestinal Motility

### Educational Objectives

1. Acquire knowledge of the clinical scenarios where GI motility techniques are clinically helpful
2. Becoming acquainted with the strengths and weaknesses of non-imaging diagnostic techniques in GI motility
3. Learn about the indications, clinical value, and pitfalls of radioisotopic imaging investigations in paediatric GI motility conditions

### Summary

Gastrointestinal motility disorders are common condition in children. Although they usually represent a benign problem, parents are concerned that the symptoms may be manifestation of a serious disease. The child is often severely disabled and the practitioner may be focused on ordering tests that can diagnose other diseases for which medications or surgeries may be needed.

Antroduodenal manometry (ADM) is a diagnostic tool that provides both a qualitative and quantitative assessment of the foregut motor function by recording intraluminal pressure changes within the gastric antrum and the proximal small intestine.

The introduction of colonic manometry and recent innovations in both its technique and the modalities of catheter placement have now made it possible to understand more thoroughly the motor characteristics of the entire colon.

Scintigraphic techniques in the investigation of the gastrointestinal tract have been in clinical use for decades but are still little utilized in clinical practice. Scintigraphy is considered the gold standard for measuring gastric motility, but its clinical application has been limited in view of the lack of standardization of the technique. The major change over the last 10 years is the publication of a new guidelines that clearly define the normal range for a radionuclide gastric emptying study with a solid phase. More recently, new reports also suggest a normal range for the milk scan in young children. New guidelines on the acquisition of the whole-gut transit study, including the small bowel and colon, have also been published.

The session will provide an insight into common clinical GI motility disorders and the strengths and weaknesses of the commonly utilised non-imaging and imaging diagnostic techniques in the management of these difficult patients.

**Key Words**

Paediatrics – scintigraphy – GI motility