

MEETING ABSTRACT

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Ultrasonography in pediatric inflammatory bowel diseases

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Inflammatory bowel diseases (IBD) are an heterogeneous group of chronic disorders of intestinal inflammation characterised by periods of remission and exacerbation. Crohn's disease (CD) and ulcerative colitis (UC) are the two major clinical subtypes of IBD [1]. CD is characterised by transmural inflammation in a non contiguous pattern anywhere from the mouth to the anus. Ileocolonic region is the most common location of disease in pediatric CD. Classically, UC involves disease that extends proximally for a variable distance from the rectus, with involvement of the superficial layers of the colonic mucosa. Pancolitis is the most frequent presentation of UC in childhood. Disease courses are different not only in childhood from adult life but also in the different ages of pediatric patients [2]. Definitive diagnosis of IBD relies on endoscopic and histologic findings often supported by radiologic imaging. Ultrasound scanning as innocuous and ubiquitous imaging technique can be used both as screening diagnostic tool in patients with suspected IBD than in the clinical management of patients with proven IBD in the effort of detect extension, grade of activity and early individuation of complications in the follow-up. Ultrasound can be performed as a standard examination without preparation called transabdominal ultrasonography (TUS) or associated with previous ingestion of an oral contrast solution that produce an osmotic fluid distension of intestinal lumen for a more sensitive and detailed valuation of sonographic aspects of the bowel wall called small intestine contrast ultrasonography (SICUS). In Crohn disease recent data in literature show that SICUS improves sensitivity in detecting small bowel lesions both in previous undiagnosed patients from 75% to 100% than in patients with proven CD from 76% to 100% compared to TUS [3]. The execution of ultrasound in the evaluation of pediatric intestinal tract requires time, good technique and experience of the

sonographer. The main goal of this presentation is to show the most important technical aspects of the execution of ultrasound examination in pediatric IBD.

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