AB198. Systematic review: diagnostic accuracy of transabdominal ultrasound in detecting intestinal inflammation in paediatric inflammatory bowel disease

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Background: Ultrasounds are typically first line imaging in paediatric abdominal pain, owing to the fact it is a non-invasive and easily accessible modality. Children with inflammatory bowel disease (IBD) often undergo repeated and invasive investigations including endoscopy and contrast radiology. This review aimed to assess the accuracy of trans abdominal US in detecting intestinal inflammation in children with IBD.

Methods: We systematically searched CINAHL, PubMed, Cochrane Library and Embase using appropriate MeSH terms. Preferred reporting items for systematic reviews (PRISMA) guidelines were used. We searched for studies which assessed the accuracy of transabdominal US in patients with known or suspected IBD. We included patients up to 18 years who had a colonoscopy performed.

Results: Our search produced 262 studies, of which 13 were included. No meta-analysis was performed. Sensitivity and specificity of US in detecting new IBD ranged from 35–91% and 90–100%. In monitoring flareups in known IBD the sensitivity ranged from 46–90% and 79–93%.

Conclusions: The accuracy of US in detecting intestinal inflammation in paediatric IBD remains inconclusive. However, it remains a useful first line noninvasive tool to assess the extent of inflammation, prior to further invasive tests. More comparative studies with larger cohort numbers between different imaging methods are needed.

Keywords: Paediatric inflammatory bowel disease; ultrasound; PRISMA

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