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DIAGNOSTIC VALUE OF FAECAL CALPROTECTIN IN DIFFERENTIATING INFLAMMATORY BOWEL DISEASE FROM IRRITABLE BOWEL SYNDROME

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Relevance. In patients presenting with chronic diarrhoea and abdominal pain, the clinical features of inflammatory bowel disease (IBD) and irritable bowel syndrome (IBS) overlap considerably. Performing colonoscopy in every such patient is invasive, costly and often unnecessary; therefore, there is a strong need for non-invasive markers of intestinal inflammation.

Aim. To analyse the diagnostic value of faecal calprotectin in differentiating IBD from IBS and in selecting patients for endoscopic examination.

Materials and methods. A diagnostic meta-analysis of faecal calprotectin and the diagnostics guidance of the UK National Institute for Health and Care Excellence (NICE) were analysed.

Results. In a meta-analysis of 13 prospective diagnostic accuracy studies (6 in adults, n = 670; 7 in children and adolescents, n = 371), the pooled sensitivity and specificity of faecal calprotectin for detecting IBD were 0.93 and 0.96, respectively, in adults; in children and adolescents, sensitivity was 0.92 and specificity was 0.76, the latter being significantly lower than in adults [1]. The authors estimated that initial screening with calprotectin could reduce the number of adults requiring endoscopy by 67%, at the cost of a delayed diagnosis due to a false-negative result in approximately 6% of adults with IBD [1]. NICE recommends faecal calprotectin testing in primary care to help differentiate IBD from IBS when cancer is not suspected [2].

Conclusion. Faecal calprotectin shows high sensitivity and specificity for differentiating IBD from IBS in adults and can reduce the number of unnecessary colonoscopies. Because of its lower specificity in children, results in this group should be interpreted together with clinical data. It is advisable to include the test in the gastroenterological diagnostic algorithm and to standardise cut-off values across laboratories.

References:

1. van Rheenen PF, Van de Vijver E, Fidler V. Faecal calprotectin for screening of patients with suspected inflammatory bowel disease: diagnostic meta-analysis. BMJ. 2010;341:c3369. doi:10.1136/bmj.c3369
2. National Institute for Health and Care Excellence. Faecal calprotectin diagnostic tests for inflammatory diseases of the bowel. Diagnostics guidance DG11. London: NICE; 2013.