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Faecal calprotectin -- a useful tool in the management of inflammatory bowel disease.

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Inflammatory bowel disease (IBD) should be suspected in any patient presenting with chronic or recurrent abdominal pain and diarrhoea. Current guidelines suggest performing invasive endoscopy with histological sampling for further diagnosis. Measuring calprotectin, a neutrophilic protein, in faeces has been proposed as a surrogate marker of intestinal inflammation. Calprotectin values have been shown to reliably differentiate between IBD and non-organic disease in symptomatic patients and, when elevated, warrant early endoscopic investigation to rule out IBD and other organic pathologies. Endoscopy with histological sampling is also used to evaluate disease activity and here, too, faecal calprotectin values seem to correlate well. In a number of studies, faecal calprotectin values have consistently shown to better assess mucosal inflammation than clinical indices and serum markers. Calprotectin's advantage of non-invasive monitoring of disease activity is especially beneficial when considering the dynamics of repeated measurements. Mucosal healing (MH) has been associated with sustained clinical remission, reduced rates of hospitalisation and of surgical resection, both in Crohn's disease and ulcerative colitis patients. Elevated faecal calprotectin levels in patients in clinical remission are associated with increased risk of disease relapse within 12 months follow-up. In most clinically quiescent IBD, residual mucosal inflammation is still present; it appears that faecal calprotectin can detect subclinical mucosal inflammation and thus might identify patients at risk for relapse. In summary, measuring faecal calprotectin can be highly useful in the diagnosis and disease management of patients with IBD and could help predict disease course.