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**THE USE OF FAECAL CALPROTECTIN IN PAEDIATRIC INFLAMMATORY BOWEL DISEASE**

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**Introduction** Faecal calprotectin (FC) is an inflammatory marker that is raised in inflammatory bowel disease (IBD) and so can be used to determine which children require further investigation.

**Aims/Background** To evaluate the use of FC in children with possible IBD by establishing if the number of negative endoscopies had been minimised without missing any cases of IBD.

**Method** A retrospective analysis of FC measurements carried out from October 2011-September 2012. FC values were obtained from the biochemistry department. Following a computerised search of the departmental records the presenting complaint, endoscopy result if applicable, diagnosis of IBD or alternative diagnosis, and follow-up or discharge were recorded for each patient.

**Results** 36 patients (55%) were not scoped. All had at least one symptom indicative of IBD. 25 of these had a FC value of  $<50 \mu\text{g/g}$ . 4 of these patients had a FC result  $>200 \mu\text{g/g}$ . None of these patients have been diagnosed with IBD. 17 patients were scoped (26%). 3 were diagnosed with IBD. Median FC for the group that were not scoped was  $30 \mu\text{g/g}$  (IQR  $30\text{--}760 \mu\text{g/g}$ ), compared with  $126 \mu\text{g/g}$  (IQR  $52\text{--}1590 \mu\text{g/g}$ ) in the scoped group. 8 symptomatic patients with known IBD had a FC test and all values were consistent with GI inflammation. There was a 38% cost saving due to 44 unnecessary endoscopies being avoided.

**Conclusion** FC is a valuable test for excluding IBD in children who present with abdominal pain and diarrhoea; and confirming relapse in established disease. However, guidelines are required to ensure the appropriate use of this relatively new test.