THE USE OF Faecal Calprotectin in Paediatric Inflammatory Bowel Disease

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Introduction Fecal 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 μg/g. 4 of these patients had a FC result >200 μg/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 μg/g (IQR 30–760 μg/g), compared with 126 μg/g (IQR 52–1590 μg/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.