**Faecal calprotectin; what does this mean for the paediatric inflammatory bowel disease phenotype?**

James J Ashton1,2, R Mark Beattie1

1. Department of Paediatric Gastroenterology, Southampton Children’s Hospital, Southampton, UK
2. Department of Human Genetics and Genomics, University of Southampton, Southampton, UK

To the Editor: There has been a sharp rise in the use of faecal calprotectin (fCP) in diagnosis and management of paediatric inflammatory bowel disease (PIBD). Emphasis is placed on avoidance of unnecessary colonoscopy through fCP screening of symptomatic patients, with those falling below the ‘normal’ cut-off not requiring further investigation, in line with adult practice[1,2]. The recent article by *Roca et al* detailingspecific paediatric values for fCP is welcomed, relaying the important information that normal values may be different in younger children[3]. There is clear utility in avoiding unneeded investigations, however this presents a flip-side to routine use of fCP. As primary/secondary-care physicians gain increasing access, patients with less severe/atypical symptoms may undergo testing and clinicians must be aware of the ‘non-IBD’ causes of raised fCP. Within the last month we have been urgently referred a child with isolated mouth ulceration, no intestinal symptoms but with fCP of above 6000mg/L. Although this patient may have eventually had an endoscopy, the referral was expedited by the fCP result. The question must now be raised as to whether use of fCP will result in a change in disease phenotype in PIBD, analogous to that seen in coeliac disease with tissue transglutaminase screening leading to earlier and more widespread referral for assessment/investigation. Paediatric gastroenterologists may start to see more IBD and previously ‘adult-onset‘ disease detected earlier. With an accompanying rise in incidence either scenario is likely to result in an increased burden on pre-existing services with more children requiring specialist input[4].

References

1 Kawada PS, O’Loughlin E V., Stormon MO, *et al.* Are We Overdoing Pediatric Lower Gastrointestinal Endoscopy? *J Pediatr Gastroenterol Nutr* 2017;**64**:898–902. doi:10.1097/MPG.0000000000001192

2 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

3 Roca M, Rodriguez Varela A, Donat E, *et al.* Fecal Calprotectin and Eosinophil-derived Neurotoxin in Healthy Children Between 0 and 12 Years. *J Pediatr Gastroenterol Nutr* 2017;**65**:394–8. doi:10.1097/MPG.0000000000001542

4 Ashton JJ, Wiskin AE, Ennis S, *et al.* Rising incidence of paediatric inflammatory bowel disease (PIBD) in Wessex, Southern England. *Arch Dis Child* 2014;**99**:659–64. doi:10.1136/archdischild-2013-305419