

# Do Faecal Calprotectin Levels Influence Colonoscopy Rates?

## Introduction

Faecal Calprotectin (FC) often helps clinicians to decide the need for colonoscopy in patient with variety of bowel symptoms. Many clinicians are uncomfortable with intermediately raised FC and tend to opt for colonoscopies to avoid the risk of missing an organic disease.

## Aim

The aim of this audit is to assess the influence the FC level on the colonoscopy rates and pathology found.

## Methods

Data were collected from Northampton General Hospital database for all FC specimens tested between April 2015 and March 2016. We excluded all previously diagnosed IBD patients and patients under 18. We compared patients who had an intermediately raised FC (IRFC) results (51-150), patients with significantly raised FC (SRFC) results ( $\geq 151$ ) and a selected manageable sample with negative FC ( $\leq 50$ ).

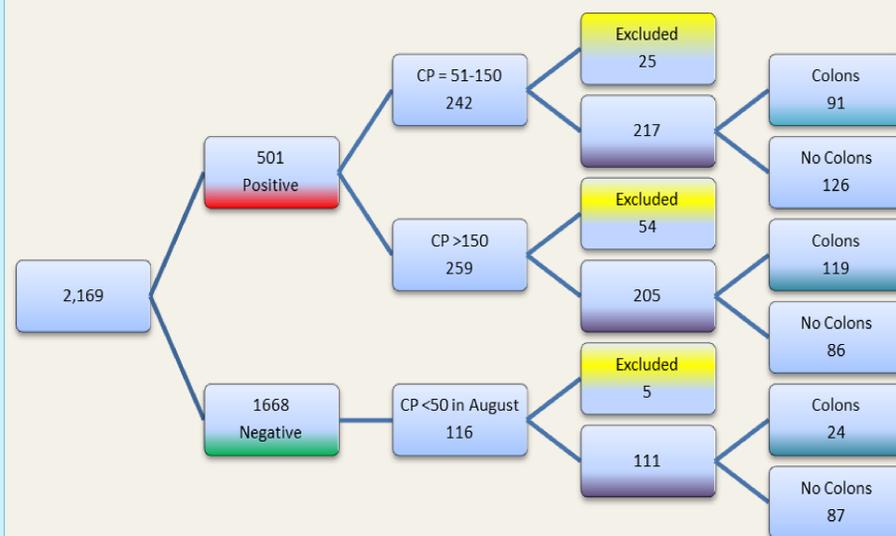


Figure 1: This flow diagram demonstrates the different groups of patients involved in our audit. 'Colons' = Colonoscopy done, 'No Colons' = no colonoscopy done.

## Results

2,169 patients were tested for FC. 501 had raised FCs. 79 known IBD patients were excluded. The remaining were 217 patients with IRFC and 205 with SRFC. 111 of the FC negative group from August 2015 were studied (see Figure 1).

Colonoscopies were done in 91 patients (42%) of the IRFC group, compared to 119 patients (58%) of SRFC. 24 patients (22%) with negative FC had colonoscopy (See Figure 2).

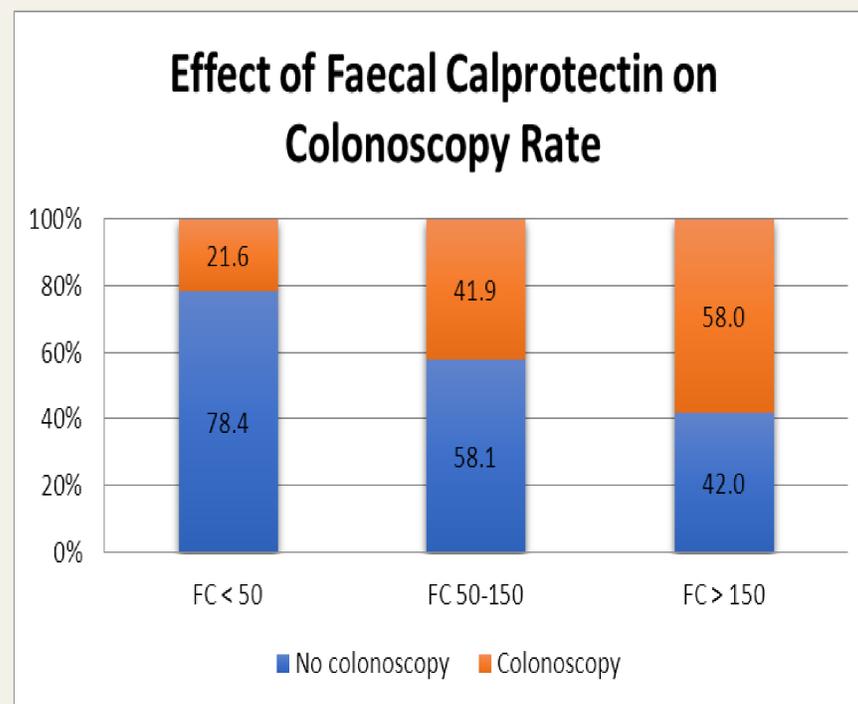


Figure 2: This bar chart illustrates the percentage of patient who had diagnostic colonoscopies in each group.

Age and gender had no influence on the colonoscopy rate, but FC significantly influenced the rate of colonoscopy referral ( $\chi^2$  test,  $p < 0.0001$ ).

96% of the patients scoped with FC  $\leq 50$  had normal colonic mucosa; one patient aged 66 had an adenoma.

## Results

78/91 (86%) patients with IRFC, had normal colons, 6 patients were newly diagnosed with IBD and 7 patients were found to have other colonic pathologies. This included 2 cancers seen in patients aged 42 and 55 who had weight loss or rectal bleeding. In the SRFC group, 70/121 (58%) had normal colons. 30 patients (25%) were newly diagnosed with IBD and 21 patients were found to have other colonic pathologies including 6 cancers (See figure 3).

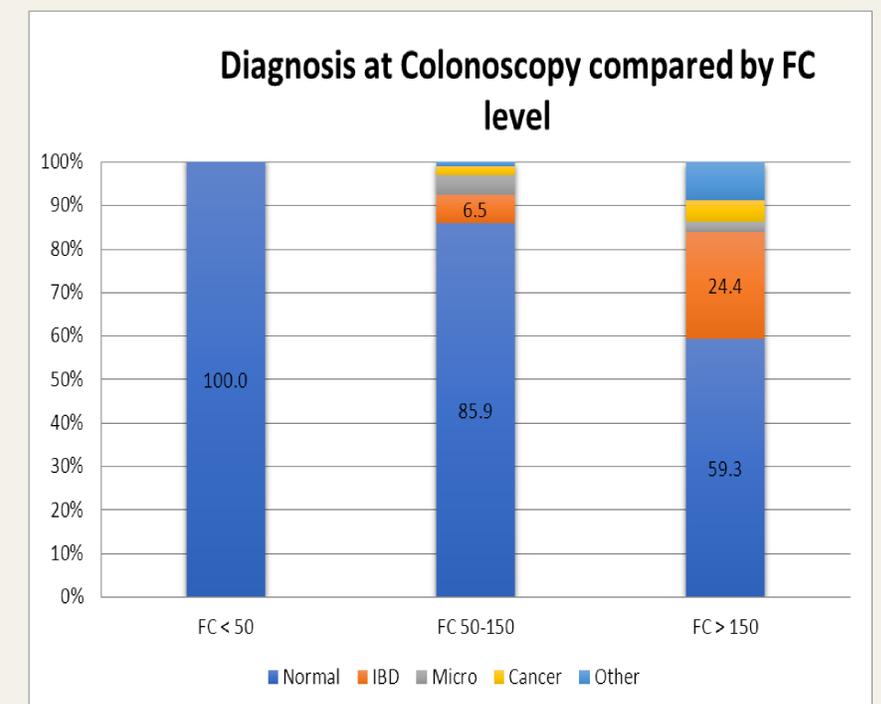


Figure 3: This bar chart shows the outcome of diagnostic colonoscopy in relation to the FC levels.

## Conclusions

Faecal calprotectin significantly influences the rate of colonoscopy referral and outcome. There was good evidence to support colonoscopy in patients with FC > 150, but 86% of patients had normal colons with FC of 51-150 and a repeat FC in the absence of warning symptoms would be reasonable, particularly in younger patients.