

# P275. Bile acid malabsorption involvement in Crohn's disease symptoms. Its relationship with ROME III criteria

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## Background

Irritable Bowel Syndrome with diarrhoea (IBS-D) or Functional Diarrhoea (FD) symptoms, according to ROME III criteria, are common in Crohn's Disease (CD). Forty percent of IBS-D or FD patients have Bile Acid Malabsorption (BAM). The role of BAM in CD symptoms is not well known.

The aim of this study is to evaluate the contribution of BAM in CD symptoms and its relationship with the presence of IBS-D and FD symptoms according to Rome III criteria.

## Methods

Prospective observational study. Consecutive patients with CD referred for ileocolonoscopy were included. Clinical, endoscopic and biologic data were evaluated and a SeHCAT test was performed. BAM was defined as an abdominal retention at day seven less than 10%, and severe BAM as <5%.

## Results

Forty-two patients with CD were included, 66% (28/42) had bowel resection. Seventy-one percent (30/42) of the patients fulfilled ROME III criteria (20/42 IBS-D, 10/42 FD). Ileocolonoscopy identified ileal inflammation (Rutgeerts equal or greater than 2, SES-CD >3) in 7/24 of the patients with bowel resection and in 5/13 of the non surgical group. Seventy percent (28/40) had BAM (23/26 in the surgical group and 5/14 in the non surgical group).

SeHCAT retention was lower in patients who fulfilled FD ROME III criteria or in those who fulfilled IBS-D criteria than in those who did not fulfil any of the criteria ( $1.3 \pm 1.9\%$ ,  $10 \pm 13.2\%$  and  $19.9 \pm 23\%$ ,  $p < 0.04$ ).

Severe BAM (<5%) was more frequent in the surgical group 20/26 (77%) than in the non-surgical group 3/13 (23%),  $p < 0.002$ . Among those patients who had surgical resection, severe BAM was related to the length of bowel resection (SeHCAT <5%:  $37 \pm 21$  cm vs. SeHCAT  $\geq 5\%$ :  $19 \pm 6$  cm,  $p < 0.001$ ).

The presence of diarrhoea was associated with severe BAM. Sixty-nine percent (18/26) of the patients with diarrhoea had severe BAM compared to 33% (4/12) of the patients without diarrhoea ( $p = 0.003$ ). The number of bowel movements per day in patients with or without severe BAM was  $4.4 \pm 2.5$  and  $2.8 \pm 1.9$  ( $p < 0.04$ ) respectively.

Neither endoscopic activity nor analytical parameters were related to the presence of BAM.

## Conclusion

BAM is common in CD, particularly in patients who have had a bowel resection. The severity of BAM is related to the length of the bowel resection. The presence of IBS-D and FD symptoms in CD can be explained, at least in part, by BAM. Therefore, a SeHCAT test could be useful in these patients.