

BACKGROUND: Mucin patterns are known to vary in ulcerative colitis (UC). This is believed to be an indicator of disease progression especially the risk of carcinoma. **OBJECTIVES:** To characterise mucin patterns in a cohort of UC patients and to correlate clinical and histological activity with the depletion of sulphated mucin. **METHOD:** The biopsies of 26 UC patients were assessed for histological activity using the Bristol histological disease activity index, degree of depletion of sulphated mucin following high iron diamine staining using a semi quantitative scale of 0 - 4, and clinical activity using a questionnaire based on the simple clinical colitis activity index. Clinical and histological activity was categorized into 3 grades. The biopsies of 25 patients investigated for irritable bowel syndrome (IBS) were assessed for mucin depletion. **RESULTS:** The diseased and control group (IBS) was comparable. None of the patients in the control group showed depletion of sulphated mucin. Results of the 26 UC patients:

Grading	Clinical activity (Grade)	Histological activity (Grade)	Degree of mucin depletion
0	NA	NA	9
1	13	5	12
2	12	8	5
3	1	13	0
4	NA	NA	0

The correlation between depletion of sulphated mucin and histological activity ($\chi^2 - 0.075, p > 0.05$) and clinical activity ($\chi^2 \sim 0.462, p > 0.05$) was not statistically significant.

CONCLUSIONS: The majority of UC patients showed absent or mild depletion of sulphated mucins (21/26, 80.8%), implying a lower risk for colorectal carcinoma. The poor correlation of mucin depletion with histological and clinical activity enhances the value of mucin stains in the follow up of UC patients.