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IgA protease-producing bacteria in patients with ulcerative colitis

SIR,—We have studied the relationship between IgA protease producing bacteria and the pathogenesis of inflammatory bowel disease for several years. We read with great interest the study by Barr *et al* (*Gut* 1987; **28**: 186-9) concerning IgA1 protease activity of the colonic bacterial flora obtained from five patients with ulcerative colitis. They concluded that colonic bacterial IgA1 protease production was unlikely to contribute to the pathogenesis of ulcerative colitis, on the basis that any isolate from patients with ulcerative colitis was unable to provide IgA1 protease activity.

In our studies, four bacterial strains (three strains of *Bifidobacterium spp* and one strain of *Clostridium sp*) capable of releasing IgA proteases were isolated from faecal material of three of 17 patients with inflammatory bowel disease.¹ Interestingly, the extracellular enzyme produced by *Clostridium ramosum* from an ulcerative colitis patient was specific to not only IgA1, but also to IgA2 (A2m(1) allotype).^{2,3} The isolate frequency of *Cl ramosum* producing IgA protease was no more than 3%, although IgA protease negative *Cl ramosum* was indigenous (approximately 80% detected) in the human intestinal tract.⁴ So far, we have no evidence supporting that IgA protease played a role in the pathogenesis of inflammatory bowel disease.

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Colorectal carcinoma in ulcerative colitis

SIR,—The Swedish study¹ and the accompanying editorial² in a recent issue of your journal have reiterated the need for cancer surveillance in patients with long standing ulcerative colitis. The Swedish study does not clarify the referral pattern of their centre. Two other recent editorials^{3,4} have pointed out that most of the cases of carcinoma complicating ulcerative colitis have been reported from tertiary referral centres. Another interesting comment in some of the recent articles is that this complication may have some geographical basis as well.^{5,6} Studies from Czechoslovakia,⁵ Denmark⁶ and Israel⁷ have failed to show the higher risk of cancer reported from other countries.^{8,9} The Czechoslovakian study was from a centre which was getting referrals of all patients with ulcerative colitis over a period of 40 years.⁵ Thus the bias of a referral centre reporting an exaggerated incidence of cancer in such patients was excluded. The authors pointed out that colorectal cancer is not uncommon in the general population. The study from Denmark accounted for more than 99% of the patients with ulcerative colitis in the region.⁶

Although ulcerative colitis is not uncommon in India, the complication of cancer has been rarely reported among Indians.¹⁰ This observation has led some of the gastroenterologists to proclaim that surveillance in Indian patients may not be warranted.⁴ We do not agree with this but feel that there is a strong geographical basis for the development of colitis carcinoma. At our centre, which is a referral hospital for five of the north Indian states, we have encountered four cases of carcinoma complicating ulcerative colitis in the last 10 years. In the same period about 400 cases of ulcerative colitis have been managed by us.

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