

Reply

SIR,—Dr Mahida restates the observations made in his earlier paper¹ on IL-2R expression in inflammatory bowel disease. In this work the classification of the IL-2R+ cells in frozen sections and on cytopins of isolated cells as macrophages or lymphocytes was made on morphology, whereas in our paper we attempted to do it by surface marker expression in situ. No double staining with anti-CD3 or a pan-macrophage antibody was carried out in the study of Mahida *et al.*,¹ either in sections or on cytopins, to determine the phenotype of the cells. They described the morphological appearance of the IL-2R+ cells and not the phenotype. We think it unhelpful to ascribe cell lineages based on morphological appearance in a frozen section, thus the need for studies in which lineages are based on the presence of specific cell markers—for example, CD3 for T cells. In addition, it is difficult to be sure that depletion of cell subpopulations does not occur when preparing isolated cells from inflamed human intestine,² so that studies on isolated cells need to be carefully interpreted. It is not surprising that some IL-2R+ cells which look like macrophages isolated from inflamed gut can phagocytose zymosan.¹

In the study of Mahida *et al.*,¹ no quantitation of IL-2R+ cells in frozen sections was carried out so it is impossible to evaluate the assertion that no differences existed between ulcerative colitis and Crohn's disease. Likewise the assertion that the CD25+ cells are generally aggregated in the lamina propria is not borne out by the published figures (Fig 1 in our paper and Fig 2 in Mahida *et al.*). Certainly the sub-epithelial macrophage aggregates are strongly IL-2R+ in inflammatory bowel disease as we clearly stated in our paper. Outside of these aggregates in Crohn's disease, however, most of the IL-2R+ cells were CD3+ and this was not the case in ulcerative colitis.

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- Mahida YR, Patel S, Wu K, Jewell DP. Interleukin 2 receptor expression by macrophages in inflammatory bowel disease. *Clin Exp Immunol* 1988; 74: 382–6.
- Selby WS, Janosy G, Boffill M, Jewell DP. Intestinal lymphocyte subpopulations in inflammatory bowel disease: an analysis by immunohistological and cell isolation techniques. *Gut* 1984; 25: 32–40.

Gastric epithelial dysplasia

SIR,—We read with great interest the two papers on gastric epithelial dysplasia in *Gut*.^{1,2} These are only the latest of a series, which testifies to the increasing interest in gastric precancerous conditions and lesions in the early diagnosis of cancer, but only partly shows a better understanding of problems relating to the diagnosis and interpretation of dysplastic changes in gastric mucosa. Most reports agree that severe, or high grade, dysplasia is the most important precursor of gastric cancer and strongly recommend gastrectomy, particularly in light of the high percentage of early gastric cancers which this approach enables us to diagnose.^{1,4} None the less, others have suggested, in a further paper published in an authoritative journal,³ that 'gastrectomy is not always the treatment of choice for severe dysplasia and patients must receive a conservative clinical treatment and have frequent

endoscopies until the appearance of early carcinoma.³ Moreover, various papers report that mild, or low grade, dysplasia progresses to moderate dysplasia in only 9% of cases,³ is associated with or progresses to cancer in a small but significant percentage of cases,³ is not distinguished from high grade dysplasia in terms of evaluation of results,¹ and is not even included among cancer precursor lesions.³ This is probably confusing for those who are not directly concerned in the problem and discouraging for those who would like to find in published papers a rational approach to pre-malignant gastric lesions. We think that the reasons for these contrasting results are as follows:

(1) Gastric epithelial dysplasia is a rare diagnosis and in all the reports quoted (all of which appeared in authoritative journals) there were no more than 250 cases; only multicentre studies, such as those carried out by the British Society of Gastroenterology in which we also collaborated, are therefore likely to provide us with sufficient information.

(2) As Lansdown and coworkers correctly emphasise,² distinguishing dysplasia, particularly in its mild form, from atypical hyperplasia is not done easily or always reliably; we think that the concept of mild dysplasia is changing and though only five years ago we were confident in saying that mild dysplasia was not an indication for follow up,⁶ we now consider follow up of these lesions, when correctly classified, to be mandatory.^{4,7}

(3) The stomach is a relatively large organ and in the absence of a persistent focal lesion it is difficult to target biopsies and ensure that samples are obtained from the same site (which is why⁵ regression of severe dysplastic lesions is reported so often).

(4) Few papers have been published with results from a truly prospective study, and retrospective investigations, particularly in this field, are burdened by the risk of bias.

Nevertheless, we think that a few clinical aspects are fairly well established. Firstly, severe, or high grade, dysplasia, whether associated with gastric ulcer, polyps, erosions, or any endoscopic change, is the most reliable indicator that cancer is present or will develop in a short time and that patients must therefore undergo surgery when feasible. We think that such a policy will save the patient and the doctor medical and legal problems.

Secondly, new prospective and multicentre studies focusing more on mild and moderate or low grade dysplasias are needed because we still do not know the relative risk of cancer for each type of lesion (though we have made an attempt in this direction),⁷ whether it is justified to consider moderate dysplasia as a separate entity, or how to follow up such patients.

Finally, we agree that when expert advice is not available locally specimens suspected of dysplastic changes should be examined by expert pathologists, who should be entrusted with educating, with suitable tools, their colleagues in the field.

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- De Dombal FT, Price AB, Thompson H, *et al.* The British Society of Gastroenterology early gastric cancer/dysplasia survey: an interim report. *Gut* 1990; 31: 115–20.
- Lansdown M, Quirke P, Dixon MF, Axon ATR, Johnston D. High grade dysplasia of the gastric mucosa: a marker for gastric carcinoma. *Gut* 1990; 31: 977–83.
- Saraga EP, Gardiol D, Costa J. Gastric dysplasia. A histological follow-up study. *Am J Surg Pathol* 1987; 11: 788–96.
- Farinati F, Cardin F, Di Mario F, *et al.* Follow-up in gastric dysplasia patients. *Am J Surg Pathol* 1989; 13: 173–4.
- Coma del Corral MJ, Pardo-Mindan FJ, Razquin S, Ojeda C. Risk of cancer in patients with gastric dysplasia. Follow-up of 67 patients. *Cancer* 1990; 65: 2078–85.
- Farini R, Pagnini CA, Farinati F, *et al.* Is mild gastric epithelial dysplasia an indication for follow-up? *J Clin Gastroenterol* 1983; 5: 307–10.
- Rugge M, Farinati F, Di Mario F, Baffa R, Valiante F, Cardin F. IGGED (Interdisciplinary Group on Gastric Epithelial Dysplasia). Gastric epithelial dysplasia: a prospective multicenter follow-up study. *Hum Pathol* (in press).

Peritoneal tuberculosis

SIR,—The important study by Manohar and his Durban colleagues¹ draws attention to peritoneal tuberculosis in underprivileged communities. Their findings are in keeping with the Cape Town experience over the past 28 years.^{2–5} We question their statement that 'ascitic fluid analysis is not usually of specific diagnostic value.'³ While acid fast bacilli are rarely found in the small volumes examined, determination of adenosine deaminase in the ascitic fluid⁶ allows the diagnosis of peritoneal tuberculosis with a sensitivity and specificity of the order of 100% and 96%, respectively.^{7,8} Adenosine deaminase determination in the ascitic fluid may obviate the need for the more invasive peritoneoscopic examination.

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- Manohar A, Simjee AE, Haffeejee AA, Pettengell KE. Symptoms and investigative findings in 145 patients with tuberculous peritonitis diagnosed by peritoneoscopy and biopsy over a five year period. *Gut* 1990; 31: 1130–2.
- Novis BH, Bank S, Marks IN. Gastrointestinal and peritoneal tuberculosis: a study of cases at Groote Schuur Hospital 1962–1971. *S Afr Med J* 1973; 47: 365–72.
- Marks IN, Kottler RE, Gilinsky NH. Abdominal tuberculosis. In: Jewell DP, Shepherd HA, eds. *Topics in gastroenterology*. Vol II. Oxford: Blackwell, 1983: 191–219.
- Marks IN. Abdominal tuberculosis. In: Watters DAK, ed. *Baillière's clinical tropical and communicable diseases*. Vol 3. London: Baillière, 1988: 329–48.
- Lingenfelter T, Zak J, Ruttenberg D, Steyn E, Price S, Marks IN. Abdominal tuberculosis – newer diagnostic modalities. *S Afr Med J* 1990; 78: 354.
- Martinez-Vazquez JM, Ocana I, Ribera E, Secura RM, Pascual C. Adenosine deaminase activity in the diagnosis of tuberculous peritonitis. *Gut* 1986; 27: 1049–53.
- Voigt MD, Kalvaria I, Trey C, Berman P, Lombard C, Kirsch RE. Diagnostic value of ascites adenosine deaminase in tuberculous peritonitis. *Lancet* 1989; i: 751–4.