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Reply

EDITOR.—We welcome Professor Jones' comments on our recent paper. It is a criticism that can be levelled at any clinic based study of IBS that these patients are highly selected, not least because of high rates of psychiatric morbidity. These patients do, however, merit study in their own right as they are the very patients with whom gastroenterologists, and by inference physicians in primary care, most need help.¹ Furthermore, there are practical and ethical issues to be considered. Clinic patients are readily available and amenable to being studied. A positive result in these highly selected patients is possibly a necessary prerequisite to provide the impetus to extend an investigation into less selected groups.

Encouraged by our findings on selective affective biasing in clinic patients with IBS, we are now carrying out similar investigations in subjects with symptoms of IBS drawn from the community, both consultants and those who do not, and also in patients with other physical symptoms for which no sufficient organic pathology can be shown.

The word recognition memory test methodology that we use provides a direct but covert assessment of schema driven cognitive processing. The influence of such schemata is pervasive and we would therefore expect that these biases would apply to the preception and evaluation of physical sensations in terms of illness. IBS non-consulters have been reported to dismiss or normalise their bowel dysfunction.^{2,3} The heightened receptiveness to negative material that we found in this study might be the mechanism that prevents IBS consultants from doing just this.

What we therefore expect to find in our study of selective affective biasing in IBS sufferers drawn from the community is that those who have consulted will show abnormalities similar to those that we have reported in our clinic patients. As yet these results are not available. We have found on a preliminary analysis of our data, however, that the IBS consultants drawn from the community resemble clinic patients with respect to other indices. Using DSM-III-R criteria, 64% of our community IBS consultants qualified for a diagnosis of an affective disorder, which is a similar prevalence to that found in clinic populations.³ Also there was no difference between these community IBS consultants and our clinic patients in terms of dysfunctional illness attitudes.⁴ Our clinic patients may therefore not be quite as highly selected as they seem.

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Left sided colon cancer

EDITOR.—The neurobiology of diverticular disease leading to left sided colon cancer in 7159 patients (2478 men and 4681 women (*Gut* 1993; 34: 499-502) is suggested by reversed cerebral asymmetry in women with left sided breast cancer.¹ This hypothesis is supported by the association of specific frontal asymmetries with certain immune functions, and by compulsive ruminations occurring before oculogyric crises linked to inefficient cortical circuits and abnormalities of dopamine subserving gastrointestinal protection, immunocytes, and mood.^{2,3} It is also supported by the association of severe psychiatric disorders with severe acute colitis⁴ and by the protective role of dopamine in preferentially maintaining splanchnic blood flow.⁷ These findings suggest screening patients with diverticular disease for increased risk of malignancy by monitoring dopaminergic neurotransmission.⁸

A possible strategy is suggested by the fact that delay-dependent speeding of reaction time, reflecting motor readiness, is abolished by depletion of dopamine.³ Therefore, future studies may evaluate cognitive consequences of dopamine agonism and antagonism at intermediate dopamine tone in a medial-frontal-striatal 'activation' system underlying response organisation⁹ by monitoring behavioural correlates of mood — that is, speech hesitation and switching pauses analysed on a time base by a microcomputer. This method is supported by participatory matching of pauses in dialogues at intermediate arousal, a joint, mutually responsive rhythm,¹⁰ and by the concept of cellular tone.¹¹ Remote data acquisition¹⁰ is an efficient, unambiguous strategy to evaluate the conveyance of ideas, a task that is possibly of sufficient complexity^{12,13} to assess the role of dopaminergic neurotransmission in the development and progression of diverticular disease leading to left sided colon cancer.

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Alcohol v epinephrine and polidocanol

EDITOR.—We have read with great interest the report by Rutgeerts *et al* (*Gut* 1993; 34: 348-50). The authors state that 'absolute ethanol was superior to epinephrine-polidocanol, which was not significantly better than sham therapy'. As these results differ from other previous controlled studies even from the same group,¹ we would like to comment on some clinical, endoscopic, and methodological aspects that we consider of relevance.

It is worth noting that a high rebleeding rate (40%) and low haemostatic efficacy (68%) in the epinephrine-polidocanol injection group compared with the ethanol group (20% and 88% respectively) was seen, but these differences were not significant.

As noted by the authors, shock was more frequently seen in the epinephrine-polidocanol group (10 patients) than in the sham (five patients) and alcohol groups (seven patients). It is known that shock carries an increased risk of rebleeding,² and this could explain, at least partially, the high failure rate in the epinephrine-polidocanol group.

Apart from the type of injected substance, there are probably other factors influencing the efficacy of endoscopic injection, such as the site and size of the bleeding ulcer.^{3,4} In the study by Rutgeerts *et al*, the authors consider the proportion of gastric and duodenal ulcers between groups but not their anatomical situation. Ulcers located high on the lesser gastric curvature or posterior in the duodenal wall are more difficult to reach and have a higher tendency to rebleed.^{4,7} Furthermore, the size of the ulcer, probably one of the most important factors,⁸ is not mentioned in the study. In this sense, it has been shown that endoscopic injection is significantly less effective in ulcers larger than 2 cm.⁵

Another remarkable aspect is that the study was designed specifically to compare both treatment groups (ethanol and epinephrine-polidocanol) with sham therapy (assuming a change in response of 75%). A much higher sample size would be necessary, however, to confirm differences between both treatment groups.

Thus, we believe that there is insufficient evidence in the study to conclude that absolute alcohol is superior to epinephrine-polidocanol. The efficacy of injection therapy is probably related less to the type or combination of substances used than to other factors, such as the size and site of bleeding ulcer. These variables should be considered in studies assessing the efficacy of endoscopic injection techniques.

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