Correspondence

Oesophageal chest pain

SIR, – We would like to make three comments on the leading article by Drs Blackwell and Castell in the January issue of *Gut*.¹

They point the need for studies of oesophageal motility during effort angina in patients with proven coronary artery disease: we would refer them to our publications reporting that in six such patients we found no associated evidence of significant oesophageal dysmotility from simultaneous manometric studies.^{2,3}

They note the lack of controlled trials in the treatment of this condition: we would refer them to our preliminary report of a double blind, placebo controlled trial of nifedipine⁴ (a further paper in preparation).

They comment on the dangers of ergometrine and the advantages of edrophonium. We find the ergometrine test useful^{5,6} and believe that it is safe, provided that patients are first carefully screened from the cardiological point of view and are shown not to have coronary artery disease, and that the oesophageal study is conducted with electrocardiographic monitoring and resuscitative facilities to hand, giving ergometrine in an initial dose of 0.05 mg, doubling every two to three minutes to a total of 0.5 mg over *ca* 10 minutes. We would point out that edrophonium is a cholinesterase inhibitor⁷ and that methacholine (a cholinergic agent and thus a vasoconstrictor) is capable of inducing coronary spasm in susceptible subjects^{8,9} so that the authors' suggestion that edrophonium is safer than ergometrine seems likely to represent a type II error. Because edrophonium has not yet been shown to induce coronary spasm does not mean that it does not. We would caution against accepting the view that edrophonium is safe on present evidence.

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Reply

SIR, – We were very interested to receive the observations from Dr Alban Davies and his colleagues on our leading article and we are pleased to have the opportunity to respond to them.

In order to interpret the high prevalence of oesophageal manometric abnormalities in patients with non-cardiac chest pain with more certainty, it is desirable to perform oesophageal manometry in a group of patients with known ischaemic heart disease. We were therefore interested to hear that Dr Alban Davies and his colleagues have found normal manometric results in six patients with known ischaemic heart disease. It is to be hoped that they are extending this experience in order to make meaningful statistical comparisons with this important control group. We were also interested to hear that they are preparing a paper on the results of a controlled trial of nifedipine for diffuse oesophageal spasm. We look forward to seeing the data when this paper has been published.

The third point concerns the relative safety of ergometrine and edrophonium as provocative