with *H pylori* related diseases differed from the *H pylori* negative subgroup they have studied.

J ANDREWS
Gastroenterology Department,
Radcliffe Infirmary,
Oxford OX2 6HE

- 1 Taha AS, Russell RI. Helicobacter pylori and non-steroidal anti-inflammatory drugs: uncomfortable partners in peptic ulcer disease. *Gut* 1993; **34**: 580-3.
- 2 Wyatt JJ. Helicobacter pylori, duodenitis and duodenal ulceration. In: Rathbone BJ, Heatley RV, eds. *Helicobacter pylori and gastroduodenal disease*. 2nd ed. Oxford: Blackwell Scientific, 1992: 140-57.
- 3 Dixon MF. Helicobacter pylori and chronic gastritis. In: Rathbone BJ, Heatley RV, eds. *Helicobacter pylori and gastroduodenal disease*. 2nd ed. Oxford: Blackwell Scientific, 1992: 124-39.
- 4 Hills BA. Gastric mucosal barrier: evidence for Helicobacter pylori ingesting gastric surfactant and deriving protection from it. *Gut* 1993; **34**: 588-93.

Reply

EDITOR,—We appreciate the interesting comments of Dr Jane Andrews on our article. Her letter touches an important problem: the presence of *H pylori* in the samples analysed and its relation with surface hydrophobicity.¹

In fact, *H pylori* infection, the main cause of chronic gastritis and ulcer disease, can modify the phospholipid composition² and the gastric surfactant hydrophobicity^{1,3} because of the presence of the bacterial phospholipase A.⁴

Our study was, therefore, deliberately restricted to a selected subgroup of patients without histological evidence of gastric *H pylori* infection. We agree that an additional study needs to be done in a population that includes subjects with *H pylori* infection. We are in the process of performing such a study. The evaluation of the available data shows that *H pylori* infection induces significant variations of gastric phospholipid in the *H pylori* negative subgroup.¹ We believe this confirms that our

methodology is valid for the biochemical analysis of gastrointestinal mucosal samples.

G NARDONE
G BUDILLON
Cattedra di Gastroenterologia II,
Universita' di Napoli Federico II,
Via Pansini 5 80131 Napoli, Italy

- 1 Hills BA. Gastric mucosal barrier: evidence for Helicobacter pylori ingesting gastric surfactant and deriving protection from it. *Gut* 1993; **34**: 588-93.
- 2 Slomiany BL, Kasinathan C, Slomiany A. Lipolytic activity of Campylobacter pylori: effect of colloidal bismuth subcitrate (De-Nol). *Am J Gastroenterol* 1989; **84**: 1273-5.
- 3 Spychal RT, Goggin PM, Marrero JM, Savarymattu SH, Yu CW, Corbishley CM, et al. Surface hydrophobicity of gastric mucosa in peptic ulcer disease. *Gastroenterology* 1990; **98**: 1250-4.
- 4 Langton SR, Cesario SD. Helicobacter pylori associated phospholipase A2 activity: a factor in peptic ulcer production? *J Clin Pathol* 1992; **45**: 221-4.