Thank you for your letter of the 14 January 1987 affording us the opportunity to comment on Mr Freeman's letter in which he makes some valid points.

Firstly, we quite agree that a positive 'seat-belt sign' is a very strong indication for very careful observation of the patient and early laparotomy if there is any further evidence of intrabdominal trauma. Nevertheless, we would submit that the detection of surgical emphysema in the anterior abdominal wall in this case did prompt operation at an earlier stage than if this feature had been absent, since bowel sounds were still present and tenderness and guarding had not increased.

The source of the gas in the subcutaneous tissues remains debatable and, while accepting that it may have been introduced during peritoneal lavage, it is still possible that it originated from the duodenal tear. Since bile-stained fluid was found in the peritoneal cavity at laparotomy it is reasonable to speculate that gas could have taken a similar direct route. Alternatively, it could have tracked extraperitoneally before being expelled by muscular contraction through the unsutured defect in the linea alba into the anterior subcutaneous tissues. This mechanism seems quite plausible when one considers the rapid spread of gas along the tissue planes in other examples of surgical emphysema.

J. B. RAINEY¹ AND RITCHIE²
¹Senior Registrar and ²Senior House Officer,
Department of Surgery,
Bangour General Hospital,
West Lothian, Scotland