

to do my best for him/her, he/she should be prepared to do their best for me.' I hope I have quoted Sir Reginald correctly.

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We were disappointed that 'A prospective comparison of laparoscopic *versus* open cholecystectomy', Attwood *et al.* (*Annals*, November 1992, vol 74, p397) failed in its prime objective to make a scientific comparison between open cholecystectomy and the laparoscopic approach. Almost all their results (time to commencement of oral fluids and diet, respiratory infection/atelectasis, postoperative pain and length of hospital stay) are inseparably related to the differences in pain between the two groups.

Pain is the most important factor responsible for monotonous, shallow respirations postoperatively without deep breaths which leads to a reduction in functional residual capacity, atelectasis, shunting, hypoxaemia and respiratory complications (1). Adequate afferent blockade reverses these changes to such an extent that when it is part of balanced analgesia beginning preoperatively, lung function is completely unaffected by the nature of the surgery (2). Patients can be mobilised on the first postoperative day and complications and hospital stay are markedly reduced (3).

The type of intraoperative anaesthesia and analgesia was not mentioned in this study and postoperative intramuscular narcotics on demand can hardly be considered optimal analgesia for open cholecystectomy. With this lack of information and the inadequate postoperative analgesic regimen, a scientific comparison of these two techniques is not possible.

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I read with interest the article by Attwood *et al.* (*Annals*, November 1992, vol 74, p397). I cannot agree with the comments made regarding the so called minilap cholecystectomy which, of course, they did not assess in their study. My own, admittedly small, study of 12 such patients has shown them to start oral fluids within the 8-h period stated for laparoscopic cases in this paper and the median time to discharge home is 2 days. The wound necessary to carry out the operation is the same length as the total used for laparoscopic cholecystectomy and the operation has the advantages that it is easy to convert into a conventional open procedure and it does not, of course, require expensive special equipment. In these

days of financial stringency I am sure that the Dublin group would agree that it is now time to properly assess the technique of minilap cholecystectomy and until then their conclusion that laparoscopic cholecystectomy is superior to open cholecystectomy cannot be regarded as proven. In addition, new surgical techniques must, therefore, be assessed with respect to each of the alternatives available and cannot be regarded as superior simply by their necessity to require so called high-tech equipment.

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#### The value of water-soluble contrast radiology in the management of acute small bowel obstruction

We read the recent paper by Joyce *et al.* (*Annals*, November 1992, vol 74, p422) with interest; however, we note the use of Gastrografin® (Schering AG, Germany) in the investigation of suspected small bowel obstruction has been well described (1,2). Stordahl *et al.* (3) report a randomised prospective comparison of Gastrografin and Iohexol® (Nycomed UK Ltd) in suspected small bowel obstruction.

Gastrografin is described as 'safe' in this study. We are pleased that the authors state that patients should be well-hydrated. Clinicians should be aware of well-described complications related to its hypertonicity (2150 mOsm/kg H<sub>2</sub>O, almost seven times greater than plasma (4)), with the attendant risks of hypovolaemia in poorly hydrated patients and pulmonary oedema if aspirated (5,6). Absorption of Gastrografin can occur in the absence of ischaemia or perforation (7,8), with the consequent risks of anaphylactoid reaction (9).

Some radiologists prefer barium for the study of the obstructed small bowel, but there is a risk of barium peritonitis if there is perforation. An alternative agent is a non-ionic low osmolar agent, eg Iohexol 180 mgI/ml (osmolality of 360 mOsm/kg H<sub>2</sub>O (10)), albeit at greater expense. This agent is unlikely to cause significant osmotic shifts and provides comparable radiographic density in the gut, when considering the iodine concentration is nearly half that of Gastrografin, due to the lack of osmotic dilution. The pulmonary complications are also reduced, indeed Iohexol can be used as a bronchographic agent (11). The putative therapeutic effect of Gastrografin has been matched by Iohexol in the prospective study of Stordahl *et al.* (3).

As in any clinical situation, careful selection of patients is essential and Gastrografin should be avoided in patients who are hypovolaemic or at risk of aspiration. The article describes administration via a nasogastric tube but in the discussion advocates oral administration of Gastrografin, increasing the risk of aspiration in the ill patient.

We would strongly advise thorough patient preparation, recognition of the hazards of Gastrografin and consideration of alternative agents before subjecting the patient to a potentially dangerous investigation.

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