

# Gut

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## Leading article

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### Endoscopic demands in the 90's

Having trained in the 60's and 70's gives the advantage of both remembering a time when patients were managed without endoscopy and also witnessing the establishment of endoscopy in gastroenterology. For many training in the 80's gastroenterology without endoscopy is almost unthinkable. This development has led to the widespread belief that endoscopic visualisation of any GI lesion is the correct and desirable approach, preceding diagnosis and treatment. This approach will influence the demands for endoscopy in the 90's.

#### Upper gastrointestinal endoscopy

The skills of history taking are receiving less emphasis and have even been described as a 'valueless exercise' in the management of dyspepsia.<sup>1</sup> Upper abdominal pain is probably the commonest symptom for which upper GI endoscopy is requested. For most district general hospital gastroenterologists and the referring general practitioners the main question is 'does the patient have a peptic ulcer?' If the answer is 'yes' the clinician can then confidently start one of the many established ulcer treatment regimes. It is increasingly assumed that the question cannot be answered accurately from the history alone. There is good evidence, however, that most patients with peptic ulcer can be diagnosed on the basis of history alone. In a group of 154 dyspeptic patients 60 of 65 peptic ulcer patients were correctly assigned, and 25 of 61 patients with a functional disturbance were wrongly assigned to a diagnosis of peptic ulcer.<sup>2</sup> Many doctors would consider this degree of accuracy acceptable for such a condition as peptic ulcer. If the clinician lacks the experience and confidence to rely on his own assessment from the history, computer programmes are available which have been successfully evaluated in other geographical areas.<sup>3</sup>

If endoscopy was not inconvenient, uncomfortable and without risk and if sufficient endoscopists and funding were available there would be no question that endoscopy should be undertaken in nearly all patients presenting with upper abdominal pain. Unfortunately, none of those conditions exist so that the benefits and disadvantages must be carefully balanced. This balance will determine the demands of upper GI endoscopy in the 90's. My approach is to make a positive diagnosis of peptic ulcer where the symptoms are typical, especially when a symptom pattern have been present for more than a year, and treat appropriately without any investigation. If the patient does not respond the GP is then invited to refer him for endoscopy which will be carried out

promptly. Evidence supporting a selective approach has been published.<sup>4</sup> Implicit in this approach is that a small proportion of patients will be treated inappropriately, albeit safely, for a short time. Those doctors who regard diagnostic accuracy as paramount will need to endoscope all dyspeptic patients.

The management of heartburn is another common reason for requesting endoscopy. If a patient give a typical description of heartburn, particularly when associated with typical relieving and aggravating factors, gastro-oesophageal reflux is likely whatever the appearance at endoscopy. It therefore seems reasonable to treat such patients without investigation and only arrange endoscopy for unresponsive patients.

If open access endoscopy becomes widespread the demand for endoscopy will increase and without the first step of a careful history will lead to inappropriate investigation. Many patients referred for endoscopy to exclude peptic ulcer point to the lower abdomen when asked to indicate the site of their pain. The source of their pain is clearly not peptic ulceration and the problem will not be solved by endoscopy.

Other factors influencing demand include participation in trials of ulcer healing drugs and surveillance of cancer. There seems to be an endless sequence of new drugs which will need testing using endoscopy. Barrett's oesophagus, pernicious anaemia and partial gastrectomy are all pre-malignant conditions but the cost effectiveness or benefit of regularly screening has not been established. Should surveillance prove appropriate then demands for endoscopy will increase significantly.

In the Trent region the annual number of upper GI endoscopies has doubled from 1981 to 1986.<sup>5</sup> There is a marked variation from district to district, ranging from 1.7 to 23.6/1000 of population per year with a regional mean of 7.6. There is no sign of the demand slackening and, unless checked by guidelines for appropriate endoscopy, the annual demand in the nineties could easily be 12/1000 of the population.

#### Colonoscopy

In contrast the demands for colonoscopy have not yet reached the predicted level suggested in a report from the Endoscopy Section Committee of the BSG.<sup>6</sup> This report which is well founded suggests an annual rate of 1.6 per thousand population. In the Trent Region in 1986 there were only 0.9 colonoscopies per thousand population, although two districts did achieve a rate of 1.6.<sup>5</sup>

The role of cancer surveillance in the colon is perhaps

clearer than in the oesophagus and stomach. The risk of large bowel cancer in various conditions is clearly established and the value of early resection is well documented. Perhaps one third of all colonoscopies will be diagnostic rather than for polypectomy or cancer surveillance<sup>6</sup> and, as in upper GI endoscopy, a wide variation in the demands for diagnostic colonoscopy is likely depending on the value attached to the clinical history, and the use of the easier option (at least for the gastroenterologist!) of barium enema examination. For instance, in suspected irritable bowel syndrome some gastroenterologists might colonoscope most patients, others may choose a barium enema and yet others may rely on a typical history and arrange few if any investigations. The proportion of each type of gastroenterologist will have a significant effect on demands for colonoscopy in the nineties.

### ERCP

In the Trent region in 1986 there were 0.37 ERCP examinations per thousand population, an increase of 50% since 1981.<sup>5</sup> At present it is only undertaken in half the districts but this service will probably be required in each district within the next ten years. With an increasingly elderly population the need for sphincterotomy to treat obstructing common duct stones in patients unfit for surgery will increase and may become the preferred option even in those fit for surgery. In a recent study undertaken on behalf of the Clinical Services Committee of the BSG<sup>6</sup> it was estimated that 0.16 sphincterotomies annually will be required per thousand population. Preliminary endoscopic diagnosis and drainage of obstructive jaundice before definitive surgery is likely to increase. In many patients palliation for obstructing pancreatic or bile duct tumours may be achieved solely by retrograde stenting. Approximately 0.09 palliative procedures will be required annually per 1000.<sup>6</sup>

The annual demand for therapeutic ERCP procedures will be of the order of 0.25 per thousand population. With

improved ultrasound scanning and improved access to computed tomography scanning the demand for ERCP in the diagnosis of pancreatic disease may not increase substantially. Based on the experience of Gloucester, Cheltenham, and Portsmouth districts<sup>6</sup> the number of diagnostic ERCP procedures is likely to equal that of therapeutic ERCP procedures. Thus each district may need to provide ERCP services for approximately 0.5 per 1000 population annually. This through-put may be insufficient to develop and maintain the necessary skills so that combined units across districts may be required.

### Role of the BSG

The BSG could provide a consensus on the indications for endoscopy and ensure that all reasonable demands for endoscopy are met in each health district by publishing its conclusions and drawing the attention of the public to deficiencies in provision. Changes in methods of hospital funding should not modify the indications for endoscopy in order to attract funds but should continue to be undertaken on the basis of sound clinical judgement.

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