Obscure gastrointestinal bleeding

Gastrointestinal bleeding may still be a diagnostic problem: some 5% of causes are obscure or difficult to diagnose.¹ In theory this is 1250 patients each year of the 25-30,000 admitted to hospital with gastrointestinal bleeding.² The number of admissions of patients classed as having obscure bleeding has, however, fallen in the past 30 years with the rise in the investigations available to make precise diagnoses,³ and thus the definition of "obscure gastrointestinal bleeding" is changing.

Obscure bleeding falls into three categories. In the first the cause is common but has been unusually difficult to diagnose. Peptic ulceration, haemorrhoids, oesophageal varices, and hiatus hernia may occasionally be overlooked in this way, though all are accessible to readily available routine investigations. The second category comprises multisystem disease (uncommon or not) with gastrointestinal lesions, such as leukaemia, the Peutz-Jaeger or Ehlers-Danlos syndrome, or coagulation disorders. The third group consists of cases labelled "obscure" by investigative exclusion—and hence the cases thus defined tend to reflect the techniques available, especially selective mesenteric arteriography, as well as the interests of the authors of the reports.

In patients in the first two categories of obscure bleeding a careful history, examination, and haematological and endoscopic investigation should disclose most diagnoses—with a particular emphasis on the necessity for thorough investigation of both upper and lower gastrointestinal tract when there is any doubt. It would be interesting to know how many common causes of gastrointestinal tract bleeding are not picked up on the first appropriate investigation. In the third group energetic investigation (which may even include laparotomy⁴) is likely to place, by exclusion, blood loss in the right hemicolon or small bowel. Not everyone would agree to the role of arteriography as the final diagnostic arbiter because it may not be readily available.⁵ With arteriography suitable lesions can be treated by vasopressin infusion or embolisation.⁶ Thorough laparotomy has a definite place in the diagnosis and treatment of these cases, being particularly useful in younger patients, who usually have surgically detectable lesions. In patients over 50 lesions detected by arteriography increase with age,^{7,8} strengthening the case for preoperative radiology.

The main lesions that can be so troublesome are angiodysplasia of the right colon and arteriovenous malformations of both the right colon and the small bowel. In theory any lesion should be seen to be bleeding before it is removed, as angiodysplasia is more common in an aging population than was previously thought.⁹ Moreover, its presence does not always mean that it is the cause of blood loss.⁴ Angiodysplasia or arteriovenous malformations that are accessible to an endoscope may be treated by heater probe,¹⁰ electrocoagulation, or laser irradiation,¹¹ and surgery avoided. About a fifth of the patients will bleed again both from recurrent lesions and other common diseases^{4,7,12} so that to try to avoid repeated surgery is reasonable. If a patient undergoing a planned right hemicolectomy for bleeding angiodysplasia is found to have a second lesion in the small bowel this should be removed as otherwise it is accessible only at a further laparotomy. This applies as well in acute obscure bleeding, where the place of laparotomy and right hemicolectomy (ideally after arteriography) still holds. The removal of an

arteriovenous malformation from the small bowel should be regarded as treatment for that bleeding episode, but not necessarily as a permanent cure.

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Surgical deaths

At last Britain has had a comprehensive interdisciplinary review of perioperative deaths—the Confidential Enquiry into Perioperative Deaths (CEPOD), which was published just before Christmas.¹ In many countries quality control and peer review are mandatory for institutions seeking accreditation for training. In Britain cardiothoracic surgery, renal dialysis and transplantation, pathology services, and perinatal mortality are subject to local and national quality controls, but surgeons especially have been recalcitrant in accepting the need for quality control. The impetus for CEPOD came from Lunn and Mushin's 1982 report on deaths related to anaesthetics, which was of necessity a limited exercise because it had no surgical input.² But after that report the Association of Surgeons agreed to participate in an interdisciplinary study of perioperative deaths, and CEPOD is the result.

The main study was initiated in the Northern, South Western, and North East Thames regional health authorities. The inquiry started at the end of 1985 and collected data for about one year. The study was carefully designed and based on a pilot study that immediately preceded the main project. Coordinators were appointed and linked local participants and independent assessors. The study looked at deaths occurring during operations and over the next 30 days. Absolute confidentiality was maintained, and data were obtained by doctors filling in detailed questionnaires that