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

took up to one and half hours to complete. The questionnaires assessed, before, during, and after the operation, the degree of supervision and the presence of the right facilities and personnel. Many facets of performance were scored by both the independent assessors and the doctors. Feedback was offered to participating doctors, but only 5% took up this offer.

There were 485 850 operations included in this study, and 5081 deaths fitted the CEPD criteria. Comprehensive paired anaesthetic and surgical data were obtained for only 2391 cases; some consultants dropped out during the study.

The distribution of deaths contained no surprises: 79% of the patients dying were over 65; 75% of the deaths occurred within 15 days of surgery; and most operations were performed during daylight hours. Trainees did more operations that resulted in a death at night than consultants and this was also true of weekends and Fridays.

The data showed inconsistencies in the numbers and types of operation and even in the dates of death. Self scoring was generally lower among anaesthetists than surgeons, perhaps reflecting surgical egotism. Low scores from assessors were given for avoidable elements in the death and for departures from ideal practice. Whether the operation was an emergency and the preoperative state of the patient were all taken into account. The necropsy rate was surprisingly low at 43%, with less than a third of the surgeons attending the necropsies.

Most deaths occurred in severely ill elderly patients who were admitted urgently or as emergencies, and most deaths occurred in general, vascular, and orthopaedic surgery. Consultants saw the patients before their operations in 66-79% of cases, but a disturbingly large number of major cases were operated on by juniors without the consultant having seen the patient. Surgery was the sole cause of death in 7% of patients because of inappropriate operations and poor pre-operative management or the wrong grade of surgeon operating. Important problems were the lack of manned emergency theatres and equipment deficiencies; some of these problems related to "economy" measures.

Some operations were performed in hospitals ill equipped to deal with critically ill postoperative patients who required intensive care. There was a catalogue of surgical misadventures relating to specific procedures, including repair of aortic aneurysms (25.6% of avoidable deaths) and prostatectomy (25% of avoidable deaths). In the main, these operations should have been performed by trained vascular surgeons and urologists. Lack of consultant supervision in orthopaedic surgery was cited as a major deficiency in emergency hip surgery, with only 19% of cases being performed by consultants. Thirty per cent of deaths in colorectal surgery were avoidable, and 17% of these patients underwent inappropriate operations—nearly 30% of patients underwent abdomino-perineal excision of the rectum.

Anaesthesia caused fewer avoidable deaths than surgery. Patients were seen by consultant anaesthetists before the operation in 82% of cases. The general state of debility of the patient was assessed using the American Society of Anesthesiology grades 1-5 (with 5 being the lowest), and most of the deaths occurred in patients who were graded 4 and 5. Consultant anaesthetists were more willing to assist trainees than were consultant surgeons and unavailability was cited as a primary deficiency in only 17.6% of trainee cases. Preoperative preparation was deemed inadequate in 33% of anaesthesia associated deaths, but this problem is interdisciplinary. There were 410 deaths in which anaesthesia played some part (14%), but in only three was anaesthesia the sole factor recorded by anaesthetic assessors.

Thus overall mortality was 0.7% with only a small fraction being attributable to surgical or anaesthetic failure or both. The main deficiencies were failure to supervise junior staff, failure of consultants to see patients before operations, and general surgeons performing operations that should have been done by specialists.

The report also showed that few districts have regular reviews of surgical and anaesthetic practice, and the main lesson for the future is that such reviews should be done regularly. The reviews should look at other postoperative sequelae apart from death and should be interdisciplinary. Codes of practice should be established, which as well as aiding audit will also help training and development of services.

Another lesson is that consultants must take more of the decisions over operations and must be more accountable. This may, however, prove difficult if we are to have only a moderate increase in the numbers of consultants but a draconian cut in the numbers of juniors. Orthopaedic surgeons, for instance, are dealt with harshly in the report, but they have fewer junior staff than those in other specialties and are under ever increasing demands, particularly from operations for joint replacement. A final lesson is that districts and regions need to have the right balance of surgical specialties.

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Which treatments work for drinking problems?

If no effective treatment exists for a common and distressing condition that runs a fluctuating course, claims will abound for sovereign remedies. This has often been the case with inebriety. While the more bizarre approaches, such as brain surgery,¹ treatment with lysergide,² or apnoea induced by scopolamine as a form of aversion,³ all came and went, "the treatment of alcoholism" in most Western countries gradually and by consensus settled down to a package of group therapy, individual and family counselling, referral to Alcoholics Anonymous, and aftercare, together with an insistence on abstinence as the therapeutic goal.⁴⁻⁷ When research suggested that the expensive paraphernalia of the orthodox and intensive regimen conferred little advantage over much simpler interventions,⁸ it began to be argued that conventional treatment constituted a package of nostrums lacking scientific proof of efficacy.^{9,10} Abstinence as the treatment goal had also come under attack.¹¹

Happily there is now movement upwards from that trough of pessimism and confusion. The advances do not, however, allow final consensus on what treatments work. The movement is better characterised as a more confident sense of the nature of the issues that have to be addressed.

Firstly, there is a sharper awareness that excessive drinkers constitute an extremely diverse population. They vary in the nature and severity of their drinking problem, in their degree of dependence on alcohol, and in their psychological and