maintaining five patients who died but had evidence at necropsy of some potentially useful renal tissue together with the survivors. Simultaneous medication with gentamicin and frusemide (four cases) and blood transfusion (three) contributed to the onset of uraemia. Excessive crystalloid infusion with resulting pulmonary oedema was a cause of emergency dialysis in a further two patients.

Discussion

Age, diagnoses, length of dialysis, and clinical outcome in this series reflects the non-selective policy instituted for treating renal failure and does not differ substantially from that of other series from specialist centres.^{1 2} The cost of treating patients with acute renal failure was low relative to that experienced by specialist units. During the period of non-referral to the specialist centres, increased interest in managing renal failure has been

expressed by more referrals, particularly of older patients; unfortunately errors in prespecialist treatment have not diminished.

It may be concluded that managing acute renal failure outside specialist units can be carried out successfully at low cost and without an increase in patient mortality. This may be important if the present economic policies restricting the expansion of costly units are continued.

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Lesson of the Week

Jejunioileal tuberculosis: a diagnostic pitfall in Crohn's disease

CAROLINE HUMPHREYS, P N WAKE, R WALKER

We report a case of jejunioileal tuberculosis in a patient who was thought to be suffering from Crohn's disease.

Case report

A 20-year-old white man presented with a six-month history of colicky abdominal pain, diarrhoea, night sweats, and weight loss. He was pale and wasted with poorly localised abdominal tenderness. Extensive investigation showed a mild mal-absorption, and small bowel contrast studies showed jejunioileal ulceration. The results of chest x-ray examination and rectal and jejunal biopsies were normal. Probable Crohn's disease was diagnosed.

Initial conservative treatment only temporarily relieved his symptoms, and oral steroids were introduced six weeks after he presented. He deteriorated rapidly and was admitted with septicaemia. At this time an ill-defined, tender, central abdominal mass was noted. Despite intensive treatment with parenteral nutrition, antibiotics, and high-dose steroids, he developed subacute small bowel obstruction with signs of spreading irritation of the peritoneum. At laparotomy seven weeks after admission the entire small bowel except for the first loop of jejunum was inflamed and matted together. Separation of the coils of bowel showed collections of pus and intestinal contents from small perforations. The stomach, duodenum, and colon appeared normal. The clinical diagnosis

Exclude tuberculosis before using steroids to treat patients with suspected Crohn's disease.

of extensive Crohn's disease appeared to be confirmed, and a massive small bowel resection was performed with an end-to-end anastomosis between the upper jejunum and terminal ileum leaving 32 cm of small bowel.

Histology of the specimen (see figure) showed the changes of acute tuberculous enteritis. Steroids were stopped immediately, but it was difficult to treat the tuberculosis effectively because the remaining short length of small bowel prevented the patient taking oral medication. He received intravenous rifampicin and isoniazid and intramuscular streptomycin for six weeks, together

The histological specimen shows a caseating granuloma (left) and an acid-fast bacillus (right, arrow).

Walton Hospital, Liverpool L9 1AE

CAROLINE HUMPHREYS, MB, CHB, senior house officer in medicine

P N WAKE, MB, FRCS, senior registrar in vascular surgery

R WALKER, MB, MRCP, consultant gastroenterologist

with intravenous feeds for nutritional support while the remaining length of small bowel was taking over the function of the resected bowel. On this regimen he improved steadily and could tolerate a low-fat diet and oral antituberculosis treatment when he was discharged nine weeks after operation. Seven months later he was entirely well.

Discussion

Though uncommon in the indigenous population in Britain,¹ abdominal tuberculosis should not be forgotten in the differential diagnosis of abdominal symptoms, especially when patients are suspected of having Crohn's disease. The symptoms, signs, and results of investigation in the two conditions are so similar that no specific pattern helpful in the differential diagnosis is likely to emerge. Abdominal tuberculosis occurs most commonly in the ileocaecal region or peritoneum,² and diffuse disease of the small bowel alone as seen in our patient is unusual. It is important to make the correct diagnosis since steroid treatment of our patient probably precipitated the rapid progression of the disease and helped to determine the extent of the bowel resection.

It is difficult to see how the diagnosis could have been made in this patient. Accurate diagnosis of abdominal tuberculosis is possible only with a high index of suspicion and adequate histological and bacteriological material. Laparotomy is un-

likely to be performed early in suspected Crohn's disease in view of the high morbidity associated with surgery in this condition.³ There are ways to obtain a tissue diagnosis without incurring the risks of open operation. Random peritoneal biopsy in the right iliac fossa under local anaesthetic⁴ has helped in the diagnosis, and endoscopic biopsy in patients in whom the colon and caecum are affected should be considered when there are atypical features or when response to treatment is poor.⁵ These procedures would probably not have helped our patient, and some of these patients are likely still to be misdiagnosed in any country where Crohn's disease is so common and abdominal tuberculosis is so rare.

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Today's Treatment

Use of anaesthesia

Anaesthetists in the obstetric department

J SELWYN CRAWFORD

It is a characteristic of clinical practice within a hospital that the anaesthetist has the facility of being all things to all men, and that he (or almost as often, she) can restrict or extend his activities to suit the local demands and opportunities. The obstetric anaesthetist is no exception to this. In practical terms his role within a small obstetric unit will be very limited; in a larger unit his involvement will be deployed over a wider field, and its scope will become dependent on factors other than size, such as the quantitative and qualitative availability of anaesthetic and paediatric staff, and the degree of enthusiastic collaboration displayed by the obstetric and midwifery staff members.

There are five major areas of potential involvement: (a) the administration of anaesthesia for obstetric surgery; (b) consideration of systems for relieving pain in labour; (c) neonatal resuscitation; (d) intensive care of the seriously ill mother; and (e) intensive care of the seriously ill infant.

Anaesthesia for obstetric surgery

Initially, and for many decades, anaesthesia for obstetric surgery was almost the sole item of engagement by anaesthetists in obstetric units. With the exception of very few interested anaesthetists it was a tangential occupation, usually delegated to the on-call, under-trained junior anaesthetist (except for private patients), and accepted very much on sufferance by the anaesthetic establishment. Increasing appreciation of the challenges provided by obstetric patients and of the hazards to which anaesthesia exposes them, has helped to bring about a minor revolution.

The obstetric anaesthetist has now accepted the responsibility of not only providing anaesthesia (whether general or regional), but also of defining the prophylactic measures necessary to reduce the dangers associated with these activities and of rigorously supervising their sustained application. Such measures include the provision of appropriate diet, antacid prophylaxis, and advisable maternal posture during labour and delivery; the provision of anaesthetic assistance and advised apparatus at critical times such as induction of general anaesthesia; attention to fluid replacement and the anticipation of blood loss; and the provision of an appropriately equipped and staffed postoperative recovery room.

Birmingham Maternity Hospital, Birmingham

J SELWYN CRAWFORD, FFARCS, FRCOG, consultant anaesthetist