Brodrick exhumed again

In the late 1960s the expression "Waiting for Brodrick" became familiar in medicolegal circles. Eventually the Inter-departmental Committee on Coroners and Death Certification reported in 1971, and various fragments of its recommendations were slowly implemented. Improvements have been made in coroners' practice, and reforms in the procedures for the disposal of the dead have been much discussed. Some proposals, such as changes in cremation procedure and the introduction of a perinatal death certificate, are still in limbo. Recently the Registrar General has sought the opinions of interested parties, especially the British Medical Association, on the advisability of implementing some of Brodrick's recommendations about medical certification of the cause of death.

The first proposal would require doctors always to view the body before issuing a death certificate. At present a doctor has no obligation to do this, though he would be most unwise to omit it. My own inquiries in 20 European countries showed that Britain is the only place where examination of the body is not compulsory, and the proposed change seems not only eminently sensible but long overdue.

Another recommendation is that only fully registered medical practitioners should sign death certificates. In my view it is the decline in medical school teaching about a doctor's legal responsibilities that has led to the low standard of current certification of death, but it remains a matter of opinion whether a more senior doctor would necessarily be more accurate. The change should probably be made on general principles; it would affect only hospitals where a registrar or senior house officer would take the place of the house officer in issuing the certificate.

A more controversial change is the suggested reduction of the period during which the doctor should have attended the patient before death. At present a registrar of deaths cannot accept a certificate if the doctor had not seen the deceased during the fortnight immediately preceding death. The Brodrick Report recommended reducing this period to seven days, but the Medical Advisory Committee to the Registrar General seems sensible in rejecting this change. Not only would it lead to a noticeable increase in the number of cases reported to the coroner—and a consequent rise in the numbers of necropsies expected of the already stretched pathology services—but it has little logical foundation.

If a physician cannot be confident of the cause of death in a patient he last saw eight days earlier, his degree of certainty is unlikely to be materially greater at six days. In fact, the time factor seems irrelevant compared with a firm diagnosis—a doctor may see a patient every week for months and still not know what killed him but, on the other hand, a well-investigated patient known to have ischaemic heart disease may carry a better diagnosis even if he was not seen during the past month. Even in hospitals between a quarter and a third of clinical causes of death are disproved by a subsequent necropsy, and the correctness of diagnosis is not a function of when patients were last seen alive.

For many years it has been customary—though not strictly legal—for a doctor not to issue a death certificate in a case which he reports to the coroner. Several years ago the Registrar General requested that both procedures should be carried out. This led to considerable confusion, as often the doctor was reporting the case to the coroner for the very reason that he did not know the cause of death or that an unnatural condition was present. The new proposal would clearly direct that the doctor either issues a death certificate to the registrar or reports the case to the coroner.

Brodrick's next recommendation has led to considerable discussion and argument—much of it, in my opinion, sterile. At present a doctor certifies the cause of death "to the best of his knowledge and belief," but the proposal is to change this definition to "with accuracy and precision." Looked at logically this matters not at all, since a doctor acting in good faith—as surely almost all do—can merely make his best guess on the clinical facts before him. Altering the job description will not alter the basic information available. What it might do—as the Registrar's Advisory Committee has pointed out—is to stampede the doctor in far more instances into reporting the cause to the coroner, since he will be afraid that he could not come up to the legalistically sounding criteria of "accuracy and precision."

As the Registrar General himself says, the Brodrick Committee recognised that without a necropsy no doctor can know the cause of death in the absolute sense. The committee was prepared to accept a standard of confidence which was expressed as "A doctor should be satisfied he knows the cause of death and would be prepared to justify his conclusion before a group of his own colleagues of similar competence and experience." An alternative form of wording used by Brodrick, "I am confident that the cause of death was so-and-so," is probably as good as any other.

The next change suggested is that the well-established conditions currently reported by the local registrar to the
coroner should be reportable directly by the doctor. Under the present law a doctor need not report any death to the coroner—he is legally entitled to write “Multiple stab wounds” on a death certificate and send it off to the registrar, who then has a statutory duty to refer the death to the coroner. The new recommendations will oblige the doctor to refrain from giving a certificate in such cases and report the death directly to the coroner. This will be another good reason for more legal instruction in medical schools, otherwise young doctors will never know the identity of these reportable conditions.

The last recommendation affects the coroner rather than the doctor. At present the coroner notifies the registrar of the cause of death only if there has been a necropsy or an inquest. In the so-called “Form A” cases the coroner currently requires the reporting doctor to issue a certificate, but in future the coroner will have to obtain the cause from the doctor—albeit uncon- confirmed by necropsy—and deliver it for registration.

When he recently put these proposals before the medical profession the Registrar General emphasised that the Brodrick Committee had sought to encourage a doctor not to give a certificate if he was in any doubt about the cause of death. This, together with some of the changes described above, seems to make it inevitable that the proportions of deaths reported to coroners will increase. Though this can only be an advantage from the point of view of accuracy of mortality statistics it may not be popular with the public or their doctors. It will increase the number of coroners’ necropsies, which outside London are almost entirely performed by National Health Service consultants. The British Medical Association has yet to respond with its opinion on these changes, but some of them seem too sensible to be resisted.

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Urological complications of renal transplantation

Major urological complications after renal transplantation must always be regarded with concern. At best a patient with an absent or failing urine output may present a diagnostic problem. At worst overwhelming infection in a urinary fistula may threaten such a risk of death that a functioning graft may have to be removed. Few other complications have such a depressing effect on the morale of a renal unit. Furthermore, while rejection is seen by all concerned as unpredictable and so acceptable, the occurrence of urological complications is usually thought to reflect unfavourably on the surgical skill of a particular transplant team.

Attention has recently been focused on these problems in a review from Guy’s Hospital of 1000 renal transplants,1 which usefully sums up and confirms much previous information. The incidence of complications varies from one unit to another from around 5% to 20%.2 3 4 6 7 Relevant factors include the criteria for selection of recipients and whether all patients are included irrespective of their graft function—clearly a primarily non-functioning kidney cannot develop a urological complica- tion. The most common problems are obstructive uropathy and fistulas from the upper urinary tract, and vesicoureteric reflux may be a potential source of illness.

The ureter may be obstructed by a stenosis of the intramural portion and as a complication of surgical technique in the construction of the neoureterostomy. There seem to be two schools of thought on how this should be done.5 6 7 Some antireflux mechanism is thought advisable by both schools—but surgeons who prefer to open the bladder and construct a nipple or tunnel probably do so with greater conviction that reflux matters than those who use one of the quicker, simpler, extravasical techniques. The more complex methods might be expected to give more problems in the hands of the occasional transplanter or non-urologist.

Obstruction due to distal ureteric fibrosis may sometimes be due to chronic ischaemia as a result of the vascular occlusive effects of rejection on what is the endarterial supply to the ureter derived from the main artery to the kidney graft. Blood clots within the lumen and haematomas in the ureteric wall or outside it in the pelvic cavity may all cause obstruction.

The ureter may also be occluded by the round ligament, the peritoneal cord, or the inferior epigastric artery (if it is not divided during the preparation of the recipient). Occasionally, obstruction of the pelvirecture junction of the “idiopathic” type is seen—not too surprising a finding, as most urologists have found that the condition can be intermittent or suddenly progressive in the normal course of events. Its occurrence does not therefore indicate that the condition was missed at retrieval of the kidney.

The ureter may also be constricted by a cystic lymphangioma. Collections of lymph are commonly found, particularly if patients are routinely examined by pelvic ultrasonography. They rarely cause trouble, however, unless they become surrounded by a thick membrane and slowly get bigger—a process reminiscent of a subdural haematoma. Whether the lymph is derived from the graft or the recipient’s lymphatics is open to question. Nevertheless, some recent evidence suggests that cystic lymphangiomas can be prevented by painstaking attention to technique during mobilisation of the iliac vessels.11

Published reports have paid relatively little attention to the problem of lower urinary tract obstruction, and yet most units have found that enlargement of the prostate may be a cause of morbidity which may become apparent only after transplantation has restored a sufficient flow of urine for the resistance to outflow to become apparent.12 Removal of the catheter may precipitate retention, prostatism, exacerbation of upper urinary tract obstruction, or disruption of the sutures in the bladder; surgery to the prostate may be needed urgently.

Obstruction may present either as early anuria or as a fall-off in established urine output. Obstruction which develops before any urine has been produced may be impossible to differentiate from tubular necrosis (due mainly to the effects of ischaemia during harvesting) or from primary vascular throm- bosis. The other important cause of diminishing or absent urinary output occurring at any stage after transplantation is, of course, rejection of the graft.

The diagnosis of obstruction is seldom obvious. The output of urine may not necessarily be diminished, particularly in the chronic stage. The usual investigations familiar to urologists may present special problems in the patient with a transplant. Restricted powers of tubular concentration may give poor-quality urograms, and renal scanning after injection of radioactive tracers may be more reliable—at least it provides a useful supplementary investigation to test for adequate perfusion, excretory function, and obstruction.13 Retrograde urotero- graphy can be attempted, though it is often unsuccessful owing to the site of the reimplemented ureter being inaccessible. A better approach is to perform antegrade pyelography after