

we can admire the pioneering work of Charig and his colleagues, they have not presented as convincing a direct case as they might had they chosen to cast their experience as a time series (p 880), showing how with the introduction initially of percutaneous nephrolithotomy and then of extracorporeal shock wave lithotripsy successive peaks of efficiency in stone removal had been achieved while at the same time complications had decreased and hospital stay diminished. Recent surgical models for this approach are the results of management of bleeding peptic ulcer by a combined team³ and of large bowel obstruction by immediate resection often accompanied by reconstruction.⁴ In my view this is not a substandard way of making progress, though sometimes it leaves uncertainty about exactly which factors were important. Nevertheless, we can say that the urological team from the lithotripter centre is not entitled to make the type of intergroup comparisons that it has done because these are suited only to random samples obtained from a well constructed prospective experiment. Such inadequacies of logic and the statistical malfeasance that is shown weaken the case for the introduction of a new technology without the full apparatus of a controlled trial.

To discuss the economic aspects of extracorporeal shock wave lithotripsy is difficult and would make this article far too long. The money side can be made to appear attractive but the assumptions which have to be made are ill established. Do we in the National Health Service, as would happen in the private sector, look for a "return" on capital while writing that investment down? We cannot. Do we really save money by shortening hospital stay for one condition while there is pressure on beds and resources for the treatment of other things? We do not. Matters being equal (and this is a pious hope in the real world) the appraisal of extracorporeal shock wave lithotripsy makes it look cost effective.

It is my view that Challah and Mays lay too much emphasis on the ineluctable superiority of the clinical trial in all circumstances and therefore on the need for anyone who

eschews its rigour to justify his case. Nevertheless, we should heed both their analysis of the clinician's antagonism (which to strengthen their case has to neglect some of the better reasoned opposition of the past few years) and their recommendations, which include the idea of an independent technology review board, a set of standards, and a voluntary code of practice by industry. This is all fine thinking and should be considered seriously but might justify a controlled trial to see if such measures were any more effective than our current system or lack of it. Considerable further debate without commitment to one or other polarised view is needed as well as hard thinking about each individual instance.

What of extracorporeal shock wave lithotripsy at the moment? The commonsense view of the man on the Clapham omnibus smitten with severe renal colic would surely be that it is the treatment of choice for his symptomatic "fixed" stones, though a fall back to percutaneous nephrolithotomy or even open surgery will be needed in 18-20% of stones over 2 cm diameter. The long term outcome is unknown but can scarcely be worse than other forms of removal. What is now needed is a prospective study to define particular problems and difficulties within subclasses of stones. This seems to me to be a better way forward than "blind" clinical trials, though these may be required for subgroups who are exposed by a more extensive analysis and longer follow up.

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- 1 James W. Quoted by Miller.⁵
- 2 Dudley HAF. The controlled clinical trial and the advance of reliable knowledge: an outsider looks in. *Br Med J* 1983;287:957-60.
- 3 Hunt PS, Hansky TJ, Korman MG. Mortality in patients with haematemesis and melaena: a prospective study. *Br Med J* 1979;i:1238-40.
- 4 Koruth NM, Hunter DC, Krukowski ZH, Matheson NA. Immediate resection in large bowel surgery: a seven year audit. *Br J Surg* 1985;72:703-7.
- 5 Miller G. *Psychology—the science of mental life*. Harmondsworth: Penguin Books, 1970.

Attitudes to drug abuse

Abuse of heroin continues to spawn official documents, statements, and actions—which draw on a multitude of conflicting opinions. This is scarcely surprising when we are not sure of the extent of the problem; all we know is that it is increasing. The medical evidence to government committees has mostly been given by consultants working with the existing units for the treatment of drug abusers and mainly in the London area. A contrast to this medical input has come from evidence from non-medical agencies, only recently drawn into the spotlight, notably social work departments and self help organisations. The present medical services for drug abusers contact fewer than 10% of them—a statistic that highlights the view that drug abuse is essentially a socio-political problem.

The conventional approach to the treatment of drug abuse sees it as having two stages: detoxification and long term support. Detoxification is a medical prerogative. Those who argue for humane withdrawal maintain that the present system fails to provide it—but evidence given to the Social

Services Committee¹ claimed that any humane system ran the risk of abuse. Concern has been expressed about the "cold turkey" withdrawal policy in prison and the increasing number of heroin abusers who are pregnant or have young children, and these groups may well require a special response. The solution recommended by the committee for the general population was a 24 hour telephone advice and counselling service. Such services have a non-statutory basis in the community and will need adequate statutory back up to deal with special cases.

Detoxification in prison requires careful monitoring and good physical care. The use of methadone is rarely appropriate, and other drugs create problems if given for any period of time. Other special cases such as pregnant women certainly require specialist advice, but this rarely means inpatient treatment. Possibly there may be an element of "defending their own corner" from those with inpatient units. Certainly the management of withdrawal should be demystified so that its features are understood by social workers, probation

officers, prison officers, non-statutory agency workers, and parents. Their education will, however, require time and skill and cannot be left to good will.

The legal response to drug abuse seems as confused as the medical one. It is sometimes argued that if the authorities were more successful in reducing imports of drugs their efforts might be counterproductive. The purity of drugs available on "the street" would fall, and medical complications would become more frequent. The numbers of drug related crimes might rise with street prices. Against that, the number of new cases would decrease only in the long term. Problems have already been seen from the response by the courts to drug dealers—giving them long sentences. Wrangles in court have become familiar, with forensic specialists arguing how much drug in a person's possession merits the label "pusher" and a long prison sentence. The main sufferers are the "user pushers," who may or may not deserve imprisonment depending on the commentator's views.

The Social Services Committee recommended that each regional health authority should have at least one fully staffed specialist facility—and that means input from a consultant psychiatrist, a clinical psychologist, social workers, and community psychiatric nurses. Their prime aim should be rehabilitation and that implies establishing and maintaining good relations with all the available long term care facilities, most of which are non-statutory.

Local differences in the pattern of drug abuse create local demands. In the east of Scotland, for example, the pre-

dominant route of drug abuse is intravenous, while in Merseyside it is by inhalation, and as a result the complications seen in the two regions are different. Virologists have found a higher prevalence of antibodies to the human T cell lymphotropic type III virus in the Scottish drug abusers than in those elsewhere.

The voluntary agencies are already making a vital contribution. In those parts of the country with no established team of specialists they may offer the only care available. Multi-disciplinary teams (both regional and district) trying to organise and coordinate drug abuse services must incorporate these agencies as full partners. Where there is only an embryonic statutory service the professionals may have to overcome their traditional suspicion of volunteers. In this context government policies on funding have not been helpful. Three year funding is good neither for the service nor for the morale of the staff. A year may be needed to develop a team and over two years to establish its credibility with other professionals and clients. No government would be happy with a three year term to prove itself.

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¹ Social Services Committee. *Misuse of drugs with special reference to the treatment and rehabilitation of misusers of hard drugs. Fourth report.* London: HMSO, 1985. (Chairman Mrs Renée Short).

Acute pancreatitis

In Britain, as in North America, acute pancreatitis affects one in every 10 000 of the population each year.¹ Patients usually present with sudden severe abdominal pain and are admitted as emergencies to surgical wards.² The overall mortality is 8-10%, and the death rate has not been altered by the use of many different types of treatment.

The diagnosis is usually confirmed by finding the serum amylase activity twice or more the upper limit of normal, though patients with acute pancreatitis may have completely normal values. The hyperamylasaemia may be transient, and the serum lipase activity is said to be more specific, to show a more prolonged rise in acute pancreatitis than the serum amylase, and to be raised more often. Measurement of the serum lipase activity is, however, more difficult than that of the serum amylase, and laboratories are often reluctant to perform this assay. Another possibility is measurement of the immune reactive trypsin activity in the serum, but this has no diagnostic advantages over the serum amylase. Anatomical studies—such as ultrasonography and computed tomography—may show enlargement of the pancreas in about a third of cases but are not part of the routine diagnostic procedure. About 5% of patients are diagnosed at laparotomy—not a desirable approach, since the postoperative course is often stormy.

The two indisputable principles of management in acute pancreatitis are to give adequate analgesia and to set up an intravenous infusion to compensate for the hypovolaemia caused by exudation of large amounts of fluid round the inflamed pancreas. Nasogastric suction has no specific effect

on the disease and should be reserved for those patients who are vomiting. A urinary catheter should be passed if renal failure is suspected so that the flow of urine can be measured accurately. Oxygen and intravenous feeding have their advocates. If the patient is critically ill then treatment with an H₂ receptor antagonist such as intravenous ranitidine 50 mg three times daily should help prevent the development of haemorrhagic erosions. These agents will not alter the outlook in established gastrointestinal haemorrhage, however, and do nothing to compensate for the haemorrhagic tendencies of diffuse intravascular coagulation which may occur after acute pancreatitis. Many drugs have been tested for a specific effect in acute pancreatitis; all have proved to be useless—or at least of unconvincing benefit. These include aprotinin, glucagon, somatostatin, calcitonin, fresh frozen plasma, and anticholinergics.

What, then, can be done to improve the overall mortality in acute pancreatitis? Various systems have been used to identify patients with severe disease who might be particularly suitable for additional management. First attacks of acute pancreatitis and acute pancreatitis associated with gall stones both carry a poorer prognosis. In addition, low serum concentrations of calcium and albumin and a low PaO₂; a raised serum concentration of urea, raised aspartate transferase and lactic dehydrogenase activities, and a raised white cell count; and age over 55 all suggest a poor outlook.³ Peritoneal lavage may be used to assess the severity of the attack and to predict outcome⁴ but has no specific therapeutic value.⁵ A combination of clinical, laboratory, and lavage