attend school with non-institutionalised children, has also gained ground recently.

PREVENTING LONG TERM INSTITUTIONALISATION

It is also necessary to restructure and modernise available community support services for families with children. Efforts are under way to upgrade home visiting nursing services for families with newborn infants. Low cost or free child care for working mothers using the crèche system is an option thought to have practical merit, although the costs of expanding crèche care would be high. Regular schools and kindergartens might develop special education programmes for handicapped and retarded children living in the community.

A management information system will become increasingly important as plans to deinstitutionalise children become reality. "Tracking" information should be able to tell managers how many new admissions to institutions there are every year, how many readmissions there are and for what reasons, who is in foster care, where they are going to school, how many finish school, and where the trouble spots are in the system—the districts or municipalities where local personnel seem to be having difficulty getting and keeping children out of institutions.

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For Debate

Laparoscopic or minilaparotomy cholecystectomy?

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"Laparoscopic fever" has struck the United Kingdom, as evidenced by the wave of enthusiasm for laparoscopic cholecystectomy. Indeed, in some countries there have been so many laparoscopic cholecystectomies performed in selected patients with apparent good results that it has been suggested that it would not be ethical to evaluate this procedure in a randomised controlled trial.[1] While not wanting to undermine the likely potential of laparoscopic cholecystectomy we believe that it is dangerous if not unethical to accept any new treatment as significantly better than a pre-existing one that gives excellent results without putting it to the ultimate test—that is, a randomised controlled trial. Indeed, we should listen to our urological colleagues, who recently have started bemoaning the fact that no proper randomised controlled trial has been performed to compare open with endoscopic prostatectomy as there is now accruing evidence of a poorer outcome including an increased mortality from the open procedure.[2]

Although ideally a randomised controlled trial should initially be carried out comparing laparoscopic with standard cholecystectomy, we believe that the more appropriate comparison should be with the less well known but nevertheless well established procedure of minilaparotomy cholecystectomy.[3-5] This procedure is performed through a 5 cm transverse subcostal incision and uses standard operating techniques with minor modifications such as use of a headlight, longer instruments, and more emphasis on antegrade (fundus first) dissection. Indeed may surgeons are likely to feel more comfortable adapting to minilaparotomy cholecystectomy rather than laparoscopic cholecystectomy because of the obvious familiarity of operating directly on the biliary tree rather than indirectly using a two dimensional image on a video monitor.

Disadvantages of laparoscopic cholecystectomy

One obvious disadvantage of laparoscopic cholecystectomy is that if it is widely adopted a generation of younger surgeons will emerge who are not experienced in open biliary surgery. In the more than 5% of cases in which conversion to open operation is necessary it is important that the surgeon is competent at biliary surgery. Surgeons who perform minilaparotomy cholecystectomy on at least a percentage of their cases will retain their open operating skills and thus will be less likely to have operative mishaps.

Although the role of routine cholangiography is hotly debated, a clear advantage of the minilaparotomy technique is the ready access to the bile duct for cholangiography and more particularly for removing any common bile duct stones encountered as a result. Cholangiography performed during laparoscopic cholecystectomy is time consuming and if stones are found there is an increasing tendency to leave their removal to postoperative endoscopic sphincterotomy with stone extraction, a procedure associated with a not inconsiderable morbidity and mortality.[6]

Complications of cholecystectomy

The currently reported figures for common bile duct injury after laparoscopic cholecystectomy in selected patients vary from 1-7%,[7,8] the wide variance no doubt being partly influenced by the learning curve. The usually accepted figure for standard open cholecystectomy is 0·1-0·5%. Intuitively, it might be expected that minilaparotomy cholecystectomy would result in a higher rate of injury to the common bile duct than standard cholecystectomy because of the restricted access. However, the published results for about 2000 cases of minilaparotomy cholecystectomy have revealed no common bile duct injuries.[3-5,9,10] It is generally acknowledged that the common bile duct is more at risk during laparoscopic cholecystectomy than open cholecystectomy.[11] This is because traction on Hartmann's pouch causes distortion of the biliary anatomy with extreme danger of tenting up the common bile duct, especially when the cystic duct is very short. Cholangiography has been suggested as highly desirable for anatomical reasons alone rather than for detecting silent common bile duct stones.[11] If this advice is adopted it will slow laparoscopic cholecystectomy down even further and probably lead to an increase in endoscopic sphincterotomies.

Other complications have been reported after laparoscopic cholecystectomy. For example, some series have reported fatal complications from acci-

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dental bowel injury.[12] Bile leaks seem to be more common than after open cholecystectomy. Most of these and other complications are usually blamed on the learning curve. Though some undoubtedly are due to this, it is equally likely that some are inherent in the technique.

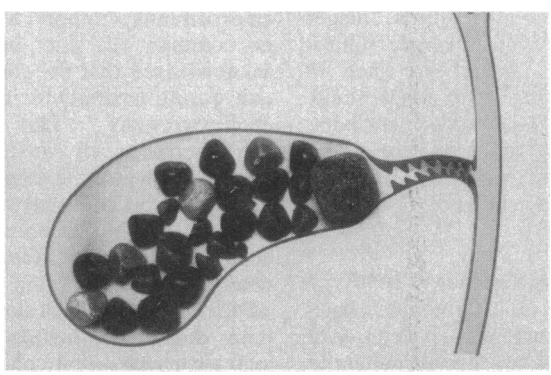
Suitable patients

Another advantage for minilaparotomy cholecystectomy is that it is safer and can be used as a first treatment for acute cholecystitis. Although laparoscopic cholecystectomy is used increasingly in acute cholecystitis it has a 33% conversion rate because of technical difficulties.[13] Therefore if a surgeon prefers to practise cholecystectomy in acute cases, with its inherent advantages, then the minilaparotomy technique is probably preferable to the laparoscopic technique.

The conversion rate for laparoscopic to open cholecystectomy varies according to the surgeon's experience but is reported to be about 5%, although we suspect that it is much higher, even in experienced hands. When better selection criteria are available a subset of patients with gall stones may emerge who will be unsuitable for the laparoscopic technique. Minilaparotomy cholecystectomy, however, is indicated for all patients with gall stones, including those in whom the laparoscopic technique fails.

Comparability of two techniques

Laparoscopic cholecystectomy in properly selected patients seems to cause minimal wound pain, early discharge from hospital, and early return to work. However, the figures usually quoted for these variables are not too different from those quoted for the minilaparotomy technique. For example, Ledet performed minilaparotomy cholecystectomy on 200 consecutive patients (age range 16-82 years) whose only selection criterion was that they wanted surgery as a day case.[4] All were discharged three to 10 hours postoperatively and subsequently experienced no significant complications. Furthermore, patients with sedentary jobs were able to return to work four to five days after the operation. Merrill also reported good results in 82 unselected patients undergoing minilaparotomy cholecystectomy, although he kept his patients in hospital for two days after the operation.[9] More recently, McDermott *et al* compared their first 50 consecutive patients treated by laparoscopic cholecystectomy (without cholangiography) with their first 55 consecutive patients treated by minilaparotomy cholecystectomy (with cholangiography).[14] They found that minilaparotomy was a mean of 24 minutes faster than the laparoscopic technique (mean time 85 min) and postoperative stay was similar in both groups.



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Randomised controlled trials are needed to determine the best method of cholecystectomy

Although in most hands laparoscopic cholecystectomy is slower than minilaparotomy cholecystectomy this difference is likely to reduce with increasing familiarity with the procedure. It is hard to envisage, however, that it will ever be as quick as the minilaparotomy technique, especially if peroperative cholangiography is performed as has been suggested. Many facets of the laparoscopic technique are yet to be fully evaluated—for example, overall morbidity and mortality, capital cost to the health service, ongoing revenue consequences, cost effectiveness, and risk-benefit analysis.

Conclusions

The published results of minilaparotomy cholecystectomy attest to its efficacy but it is being swept aside by the laparoscopic technique because of the increasingly rigid belief of many surgeons that laparoscopic cholecystectomy is unassailable. Many surgeons already accept that in selected patients laparoscopic cholecystectomy results in early discharge from hospital, less postoperative pain, and earlier return to work and are prepared to trade these advantages for a likely increase in biliary complications and loss of conventional open biliary surgical expertise. Minilaparotomy cholecystectomy offers a potential way out of this situation without appreciably compromising our patients' care. We believe it is unethical to allow patients to dictate that they want laparoscopic cholecystectomy when we are unable to guarantee that this operation is safer than minilaparotomy cholecystectomy. More effort should be put into improving the minilaparotomy technique rather than bypassing it. For example, the use of a ring retractor has been shown to make the surgery much easier.[15]

Traditional teaching suggests that a randomised controlled trial should compare a new therapy with the old, in this case standard cholecystectomy. Though this trial will undoubtedly be done, given the alleged advantages of laparoscopic cholecystectomy a fairer and possibly more rational comparison would be with minilaparotomy cholecystectomy. Without wanting to prejudge the outcome of such a trial, we believe that laparoscopic and minilaparotomy techniques would be found to be so similar that they could be used interchangeably.

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