Letters

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Early discharge after surgery for breast cancer

Three quarters of patients could not be discharged early, even with support

EDITOR—We too have found the positive effects of early discharge of patients with breast cancer. Of our last 100 operations for breast cancer, 23 patients were suitable for and accepted early discharge with the axillary drain in situ. Interestingly, 41 patients were deemed fit enough for early discharge and to have adequate social support but declined for various reasons, including feeling safer in hospital, needing the rest, and problems associated with the husband's employment. Two patients who had paid into the hospital's "Saturday fund" were anxious to stay in hospital as payments are related to the number of days in hospital.

The unit in Bundred et al's[1] study had a policy of daily phone calls and daily visits by a breast nurse after early discharge. Few breast units are likely to be able to afford to employ highly skilled breast care nurses for this purpose. Our policy is to give full oral and written information relating to management of the drain and a 24 hour contact number; during the week after discharge the patient is brought to the clinic once and phoned at home once. The general practitioner is also informed of the patient's discharge with the drain in situ. With this policy we have not experienced any problems related to the drain and have found patient satisfaction to be high.

The most important aspect of Bundred et al's study is that 73% of patients were unable to be discharged early, even with a high level of support. The significance of this is brought out in Fallowfield's editorial.[2] Clearly, two days after breast surgery patients do not require the full input of a surgical ward with its attendant high costs. The early discharge of patients after breast surgery in the United States is well known to most hospital managers, but they may not appreciate the problems that the three quarters of patients who do not return home early have.

The advent of sentinel lymph node biopsy may well shorten the average stay after surgery for breast cancer. An appreciable number of patients will still not be able to be discharged early. A good compromise would be to discharge patients to a halfway house with low level nursing input, such as a patient hotel. We would encourage managers to look carefully at the introduction of such facilities.

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1 Bundred N, Maguire P, Reynolds J, Grimshaw J, Morris J, Thomson L, et al. Randomised controlled trial of the effects of early discharge after surgery for breast cancer. *BMJ* 1998;317:1275-9. (7 November.)
2 Fallowfield L. Early discharge after surgery for breast cancer. *BMJ* 1998;317:1264-5. (7 November.)

Hotel wards are good option for patients

EDITOR—Bundred et al, Fallowfield, and Bonnema et al provide much needed information about early discharge after surgery for breast cancer.[1–3] Other work has noted the trend to outpatient or day case mastectomy in the United States.[4 5] The choice does not have to be between early discharge home and a lengthy stay in hospital. While I was director of the St Mary's Hospital Breast Group in London between 1994 and 1997 a policy of both admission and, whenever possible, discharge (to our hotel ward) on the day of surgery was instituted.

Admission to the hotel ward obviates difficulties when patients cannot be discharged home because of advanced age, lack of home support, an unsuitable home environment, or travel difficulties for the specialist nurse. The overwhelming majority of patients who were offered the option of the hotel ward took it up. This may have been influenced by the fact that patients were provided with private rooms in the hotel ward whereas this was not often possible in the hospital.

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More evidence in favour of early discharge

EDITOR—We recently published a similar randomised controlled trial to that of Bundred et al,[1] although ours compared removal of an axillary drain at 5 days with removal when the drainage volume was <30 ml/day.[2] Our population of patients was similar to theirs, with 120 patients of median age 61, although we excluded a much smaller proportion of patients than they did (30/150) and our study was not confined to patients with early breast cancer. This is reflected in the fact that a much smaller proportion (25%) of our patients had conservation surgery.

The outcome measures in the two studies were virtually identical, with incidence of seroma, wound infection, lymphoedema, and restriction of shoulder movement common to both. In contrast to Bundred et al, we found no significant difference in any of the above variables between the two groups. The patient satisfaction figures given by the authors correspond closely to our own. We found a strong preference for early removal of the drain and early discharge: 81% of patients expressed a preference for early removal of the drain followed by outpatient aspiration of seromas if necessary, including 84% of those patients who actually developed seromas.

Although our study concerned the time of removal of the drain while Bundred et al's deals with the time of discharge home, the overall findings are similar. We also found it to be safe and acceptable to allow patients home with suction drains in place, provided adequate home support was available.

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We agree with Fallowfield's comments that the high percentage of patients excluded from the trial raises questions about the application of this policy to the majority of women with breast cancer.[3] The traditional practice of keeping patients in hospital with suction drains in situ until the drainage becomes minimal is, however, unnecessary. On the basis of our study we have now changed our policy: patients are allowed home as early as two days postoperatively, with or without drains in place, and drains are removed at 5 days or when drainage becomes <30 ml/day, whichever is sooner.

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Authors' reply

Editor—We reported on the initial 100 patients enrolled in our study of early discharge. In a randomised controlled trial patients may be self selected, but without evidence from such a trial we have no firm evidence on which to base treatment. The trial is now completed and considered not only patients' psychological morbidity but also the effect of early discharge on their carers. Carers of patients discharged after a standard time took an average of 0.91 (range 0-14) days off work; in contrast, carers of patients discharged early had an average of 1.16 (0-20) days off work. Loss of wages in both groups was the same, and questionnaire studies of the carers showed equivalent satisfaction. Early discharge did not place unreasonable demands on the carers.

There will be a marginally increased cost to primary care, but the general cost to the health service as a whole is greatly reduced by early discharge; Manchester Health Authority is currently working to implement it. We cannot accept that in a rationed prioritised service the patients' carers can override the needs of the NHS service commitment. Although only a third of patients were suitable for early discharge, over the whole study (if all health authorities had provided for early discharge) over half of patients would have been eligible, so we would not be so dismissive of its potential savings and relevance.

England's and Spigelman's comment that a halfway house or a hotel ward would be equally applicable for all women would be correct if such facilities were available nationwide. In the second half of the study, when the district nurses provided care, shoulder movement was not improved as much as it had been when the breast care nurses provided care. Nursing input without adequate physiotherapy advice may not be beneficial.

We agree with Ackroyd and Reed that most women do not need to be in hospital until drains are removed. The optimal time for removal of the drain needs to be assessed in a randomised controlled trial, since increased early movement of the shoulder is associated with increased wound drainage.[2] We cannot therefore assume that results of a trial in patients kept in hospital until discharge can be extrapolated to patients discharged early.

The trial has now closed, and analysis of 200 women shows a reduction in psychological morbidity in women discharged early as well as a reduction in cost to the health service.

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Association between obstetric care and risk of suicide

Study has methodological flaws

Editor—Jacobson and Bygdeman present intriguing data suggesting that the risk of suicide is influenced by birth trauma; they argue that this may explain recent increases in suicide among adolescents.[1] However, deficiencies in the design and analysis of this case-control study should be addressed before the findings are accepted or possible mechanisms are considered.

The significant findings in Jacobson and Bygdeman's paper are confined to a subgroup of men who committed suicide using violent methods, were born and died in the catchment area of Stockholm's forensic medicine department, and had siblings whose birth records were available. The 175 males for whom the significant associations were found probably represent 25% of all suicides. The authors' suggestion that the association is restricted to violent suicides might be tested by presenting separate risk estimates for violent and non-violent suicides. Furthermore, there is overlap in the cases included in this analysis and those included in a previous study which reported highly significant associations between the risk of suicide and perinatal factors.[2] This overlap is likely to have influenced the current findings.

In case-control studies, controls should be selected from the population giving rise to the cases.[3] In Jacobson and Bygdeman's study, cases were restricted to the study catchment area but the same restriction was not applied to controls. Migration may be associated with socioeconomic and health related factors which in turn may confound the associations observed.[4]

Finally, confounding factors are those associated with both the disease and the exposure under investigation. The statistical significance (or non-significance) of a factor as a predictor of a disease does not justify its inclusion (or exclusion) in a multivariable model. The important issue is whether inclusion of the factor influences the strength of the observed association.[3] Factors likely to be associated with the risk of suicide and obstetric practice, such as year of birth, were not included in the final model, and so risk estimates may be biased.

The epidemiology of suicide is complex, and it seems unlikely that the factors investigated in this study explain the high proportion of suicides. This view is supported by another investigation of this issue.[5] Further analyses of these data are required to clarify the nature of the associations. These analyses should include both violent and non-violent suicides and make appropriate adjustment for confounding factors. The cases included in the earlier study should be excluded along with controls who no longer reside in the study area.

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1 Jacobson B, Bygdeman M. Obstetric care and proneness of offspring to suicide as adults: case-control study. *BMJ* 1998;317:1346-9. (14 November.)
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Authors' reply

Editor—Gunnell et al raise several interesting questions, to which detailed responses with numerical data have already been made (on the 6 and 26 February) and posted on the *BMJ*'s website.[1]

Our first study showed that violent suicides were closely associated with perinatal trauma whereas non-violent suicides were not.[2] Thus, we had no reason to include non-violent suicides in our new study. The "overlap in cases" results in conservative estimates—that is, if the old cases are removed then the estimated risk and attributable percentages increase. Consequently, we believe that it was correct not to exclude the old cases, especially since the methods of analysis and control were different: in the earlier study unmatched cases drawn from the general population were used and in the present study matched siblings were used.

We thank Gunnell et al for pointing out that the migration of siblings is indeed relevant. Using currently available data, we

found that the siblings who had had perinatal trauma had migrated from the study area about twice as often as had siblings who had had a normal birth. If siblings who have migrated are excluded from the regression analysis there is an increase in the risk of suicide associated with perinatal trauma and the absence of opiates given to mothers during delivery. Again, the results given in our article are conservative estimates.

We agree with Gunnell et al's definition of confounding but we disagree about including the year of birth in the regression analysis. This variable was not significant but if it is forced into the analysis it enhances the estimated risk factor for suicide after perinatal trauma. It is methodologically incorrect to deviate from a postulated hypothesis and stated method of analysis by including a non-significant variable into the regression when it enhances one of the risk factors studied.

Our study is not comparable with that of Neugebauer and Reuss; they did not use siblings as controls, and they therefore could not control as efficiently as we did for confounding by genetic, socioeconomic, and demographic factors.[3] Besides, they did not analyse perinatal trauma in a way that makes a direct comparison with our results possible (we have asked them to supply such data).

Thus, the proportion of suicides explained by perinatal factors is at least as high as that given in our paper.

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Guidelines in general practice

Information overload on GPs' desks must be overcome

Editor—Hibble et al have quantified the extent to which general practitioners are being buried under an avalanche of paper on their desks.[1] This problem does not occur only in general practice; neither is it specific to the NHS. As Muir Gray points out, the present position is intolerable and counterproductive and is getting worse, affecting not only professionals but also patients and carers.[2]

With the prevailing enthusiasm to convert all paper based information into electronic form and make it accessible over the internet, we are creating a situation in which we are gradually being overwhelmed by electronic communications. Three quarters of all business communications in Britain are now estimated to use electronic media[3]; even though this has not yet happened in the NHS, the long awaited expansion of NHSNet could bring about this degree of penetration in the not too distant future. Given the widely different designs and organisations of electronic documents placed on the multitude of websites, the internet contains mostly unorganised data, frequently of doubtful origin, instead of information. This effectively exacerbates the information overload rather than alleviates it.

Searching the world wide web to see whether certain information exists (and potentially being faced with thousands of hits) and accessing information that one knows is there require very different strategies. Accessing information that one knows is there requires clearly defined organisation of knowledge sources and different search strategies to be used by the computer system than are used by current web browsers. Over 50 general practices are now taking part in a pilot study evaluating WAX ActiveLibrary (a software system developed by the University of Cambridge; www.medinfo.cvam.ac.uk/WAX). WAX has been designed to eliminate overload on a general practitioner's desk and to ensure that relevant information can be accessed at the right time (usually within 15 seconds) and in the right form, without creating another, this time virtual, mountain.

The National Electronic Library for Health, proposed in the new information strategy for the NHS, will have an important role in providing access to national reference material. It will also ensure that this material represents more than just a collection of paper material converted into electronic form.

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Problem is that guidelines are useful

Editor—I hope that readers note the reference that Hibble et al make to the fact that guidelines can be helpful.[1 2] The problem of "the new Tower of Babel" arises only because at least some of the information in the pile is worth all the effort of creating it and being able to access it.

A positive approach would be to propose that any new guideline should:

- Add new information, not duplicate existing guidelines
- Be peer reviewed before publication
- Be written in a standardised electronic format to permit ready access.

In practice, this could be achieved as follows.

Firstly, local guidelines should cover only local aspects of care, to avoid duplicating sections of national guidelines.

Secondly, peer review could be less formal than for a research paper. As the distribution would be in electronic form, readers could feed back comments quickly: let the users be the reviewers. A moderator could delete guidelines that users considered unhelpful.

Finally, the format should be html (the universal web page format), not WAX. This (html) is fast, and everyone with a computer can access it. Users do not have to learn how to use a new program; they can just use their favourite browser. Guidelines written on a wordprocessor can be automatically converted to html with little additional effort; the software to do this is available and reliable. Users could download updates to their file of guidelines whenever they wished. This would allow fast access as the information would be on the disk in the surgery. But if general practitioners preferred not to use up their disk space they would know where to point their web browser whenever they wanted to see the latest guideline.

I can see a very big disk whirring quietly in the corner of the regional general practice office, supplying the guidelines for all Anglian general practitioners, and the new Tower of Babel being Fulbourn Hospital, where Hibble et al are based.

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Post of primary care knowledge officer could be set up

Editor—Hibble et al graphically illustrated the problem of information overload encountered by those working in primary care.[1] We agree that busy clinicians are now "caught in an information paradox—overwhelmed with information but unable to find the knowledge they need when they need it."[2] Muir Gray proposed that a chief knowledge officer is needed to manage knowledge in practice.[2] Jackson and Feder noted that clinicians need simple, patient specific, user friendly guidelines.[3] They highlighted three key components for such guidelines and advocated a pragmatic strategy for their development. Successful guidelines rely on various factors, including their scientific validity and a dissemination strategy that promotes compliance.[4]

Hibble et al discussed giving guidelines accreditation for relevance, validity (evidence base), and usefulness but thought that the process might be inefficient. Suffolk Medical Audit Advisory Group, however, thinks that this idea is worth while and feasible. With Suffolk Local Medical Committee we have established a framework to develop locally relevant, properly researched guidelines for dissemination to those working in primary care in Suffolk (suffolk-maag.ac.uk/guidelines/lmccon.html.) The process is owned by local general practitioners and

focuses on areas where considerable changes in usual practice are indicated. This often requires reallocation of resources, and thus the guidelines also inform the commissioning process. Guidelines are disseminated on paper and on our web page.

Our professional development tutor helps practices work on development plans, including implementation of these guidelines. Suffolk Medical Audit Advisory Group supports Muir Gray's idea that the management of knowledge needs to happen at organisational rather than individual level, with the chief knowledge officer taking responsibility.[2] We are advocating that primary care groups should consider funding a countywide knowledge management system coordinated by a chief knowledge officer. This should be based in a primary care resource centre, supporting continuing professional development for all members of the teams in the groups. We plan to pilot this idea.

The post of chief knowledge officer will complement and build on existing resources. With development constrained financially, we believe that information technology gives a chance to develop a primary care knowledge officer for a large county such as Suffolk without large expenditure being needed. The proposed post would integrate and disseminate knowledge electronically (with paper for those not yet connected electronically). The opportunity has arisen for true integration; we hope that we will grasp this chance.

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Female breast surgeons might be preferred but may not be better

Editor—Reid's small study to assess the preference of women for a male or female breast surgeon raises many issues about patient choice.[1] If women (or men) are to be given the choice of male or female clinicians (as Reid implies) what do we advocate as a professional body if someone conducts a similar survey but asks patients if they have a preference for the age or colour of their attending clinician? This is dangerous ground; where does one draw the line?

If we intend to offer patients the choice of male or female doctors should we also be willing to make provision for all preferred characteristics? The comments that patients who had no preference thought that the surgeon's sex does not affect competence and that the most important factor is a "good surgeon" (whatever that means) are really the only relevant messages in Reid's paper. I suggest that Reid conducts her study again with the emphasis on surgical competence and relates the question about sex to this and not vice versa. Do women who prefer a female surgeon still have this preference if a male counterpart is a better surgeon? The message seems to be clearer than ever: it is important to appoint the best person suited to the job. In time patients may have access to league tables of surgeons, which will make the question of sex largely irrelevant.

A policy of positive discrimination to appoint more female surgeons may annoy male trainees who are looking for prospective employment. In recent years enormous effort has been made to make appointments based on merit and achievement and not simply on the basis of sex.

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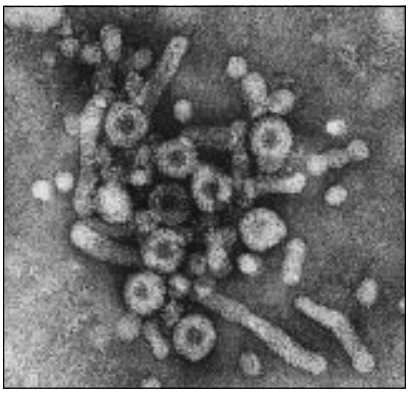
More than third of world's population has been infected with hepatitis B virus

Editor—The news items on the prevalence of hepatitis B infection is incorrect and the accompanying artificially coloured photograph is misleading.[1] Electron micrographs are usually negatively stained (figure).

More than a third of the world's population has been infected with hepatitis B virus.[2] It is estimated conservatively that there are 350 million chronic carriers of hepatitis B virus worldwide. Many are lifelong carriers, although not all are infectious, and some clear the virus after varying intervals. About a quarter of carriers develop serious liver disease as a result of the infection, including chronic hepatitis, cirrhosis, and primary liver cancer. The World Health Organisation estimates that hepatitis B results in 1-2 million deaths every year worldwide.[3]



Electron micrograph of hepatitis B virus (double shelled particle) and excess surface antigen protein (tubular forms and small spherical particles) (magnification ×252 000)

One million people are estimated to be infected in the WHO's European region each year. Of these, about 90 000 will become chronically infected and about 22 000 will eventually die from cirrhosis or liver cancer.[4] The sexual route is the most common means of spread of the virus in Europe and North America. Those aged 15-24 are at the highest risk. In 1992 the World Health Assembly recommended that all countries should introduce hepatitis B vaccination into national immunisation programmes by 1997. Regions with a low prevalence of infection, such as Europe, North America, and Australia, should consider immunisation of all adolescents as an addition or alternative to infant immunisation.[5] This policy has been implemented by over 95 countries and most European countries (but not by the United Kingdom).

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The last armed service hospital

Editor—The decision to close the Royal Hospital Haslar at Gosport was announced by the Ministry of Defence amid some woolly proposals for a new centre for defence medicine and promises of money for recruitment. The headline in medicopolitical digest called this a boost for service medicine[1]; it seems more like the kiss of death.

With no established centre of clinical expertise and training it will be impossible to maintain some important functions. Military wings in civilian hospitals have failed to provide rapid clinical services for expensive, highly trained servicemen. "Buying in" to replace shortfalls in skilled staff cannot replace training on the job, as proved by attempts with engineers, lawyers, and pilots. Good young doctors will not join the armed services, even for general duties, if there are no opportunities for specialist training. Only a core hospital can develop and maintain skills in military medicine and surgery.

Ironically, because of dissent among the three armed services and confusion of aims in the local NHS the only effective opposition to closure has come from civilians treated at the Royal Hospital Haslar, originally to provide training material. The perceived need for emergency and specialist cover for

100 000 people in the Gosport peninsula, isolated by poor roads, led to a protest march by 20 000 and to 150 000 signatures on a petition. The minister of health (not defence) was obliged to visit and promise on camera that full accident and emergency facilities would be retained (presumably with specialist back up).

Currently, the superbly equipped but patchily staffed Royal Hospital Haslar provides both this and the pool and the expertise to cover, with difficulty, many service commitments in the world, including Kosovo. Trained and experienced surgical teams are available at short notice, and advanced telemedicine is used to provide expert advice.

The main excuse for closure was the partial failure of the Royal Hospital to meet the disparate needs of all three armed services and the local NHS. This problem has been addressed, not by positive proposals to make it succeed but by abject retreat. It may already be too late because of the many "premature voluntary retirements" from once enthusiastic clinical trainees and consultants, but there is a possible solution.

The new centre for defence medicine, integrated with the NHS, should be sited at the Royal Hospital Haslar, next to the established Royal Defence Medical College. Proper consultation and funding, planned jointly by the Ministries of Defence and Health, could satisfy the needs of both the services and the local civilians. The United Kingdom would not become the only major Western country with no military hospital.

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1 Defence medicine in UK given a boost. *BMJ* 1999;318:131. (9 January.)

Anaemia in blood donors is not being properly investigated

Editor—We agree with Hin et al that occult coeliac disease is common in cases of unexplained anaemia and that testing for coeliac disease by looking for IgA endomysial antibodies is underused.[1] We have been studying blood donor volunteers turned away by the National Blood Authority because they are unexpectedly found to be anaemic in routine screening before donation. The authority contacts the general practitioners of all women with a haemoglobin concentration less than 11.5 g/l and all men with a value below 12.5 g/l. In our initial pilot study, 7% (32) of 483 anaemic blood donors tested positive for IgA endomysial antibody and were therefore likely to have coeliac disease.

After 3-6 months, we sent out questionnaires to all subjects who had been endomysial antibody positive. None of the 22 who responded had been considered for coeliac disease serology. Indeed, in 14 no follow up tests of any sort had been organised, and in 18 oral iron had been prescribed empirically with no attempt to explain the anaemia. Hin et al found that 3% of a preselected, mostly symptomatic study group had coeliac disease. Our subjects all felt well enough to donate blood and had no specific health complaints. Targeted serological testing, particularly focusing on cases of unexplained anaemia, offers a simple and worthwhile way to diagnose unsuspected coeliac disease in a large number of cases.

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1 Hin H, Bird G, Fisher P, Mahy N, Jewell D. Coeliac disease in primary care: case finding study. *BMJ* 1999;318:164-7. (16 January.)

Laparoscopic versus open mesh repair of inguinal hernia

Editor—Our paper on hernia repair produced much correspondence.[1 2] In response to the letter from Notaras we agree that patients unfit for general anaesthetic, and therefore not suitable for laparoscopic repair, would be suitable for local anaesthetic, and this is how we would treat them. We do not agree that the reduced pain after laparoscopic repair, the improved quality of life, and the faster return to work and other activities are unimportant to the patient. Our view that these constitute important improvements from the patients' perspective is borne out by our table showing patient satisfaction (table 6).

Rose et al point out the absence of serious complications in any of our patients. We state in our discussion that our trial was not powered to detect a difference in serious but rare complications. Good training is essential to avoid these. We have not experienced such complications (vascular injury, gut injury, etc) in over 1000 laparoscopic repairs. Figure 3 in our paper was coloured erroneously in the published article and an erratum has been printed. It shows that the patients having unilateral and bilateral laparoscopic repairs (unbroken lines) returned to normal activities more quickly than either the patients who had unilateral open repair or those who had bilateral open repairs (broken lines).

We congratulate Kark et al on their figures for return to work after open mesh repair. It is only fair to point out that their patients are self paying and may be under more pressure to return to work. They may also have a younger average age. We agree with Taylor et al that the hospital cost of laparoscopic repair may be reduced, and we have stated this at the end of the article.

Anayanwu and O'Riordan are concerned that trainees and consultants may not have a standardised surgical technique, but this is not the case. The operating technique was standardised and the surgeon designated before randomisation. We do not feel it was possible to blind surgeons, patients, and assessors in our trial as informed consent included the description of wounds and their position and the use of local anaesthetic for the open repair only. Can the authors tell us how blinding could have been achieved?

On the issue of whether observational studies are less biased than unblinded clinical trials, most of our outcomes were measured by questionnaires completed by the patients and did not require professional judgment.

In answer to Kernick and Reinhold, costing the difference between the treatments in recovery times (and hence in healthy time at work or undertaking other activities) is an area of methodological controversy.[3] However, we did present information on recovery times that would facilitate an estimate of differential productivity costs. The question of the relative cost effectiveness of the procedures has also been raised. We did not address this in the paper. Such an analysis requires assessment of the extent to which any additional cost of laparoscopic repair (and our sensitivity analysis showed this to be sensitive to the use of disposables with the procedure) is justified by an overall improvement in outcome. This requires outcomes to be valued on a single dimension and in generic units that can be compared with other uses of healthcare resources. Future research is currently being planned to address this question.

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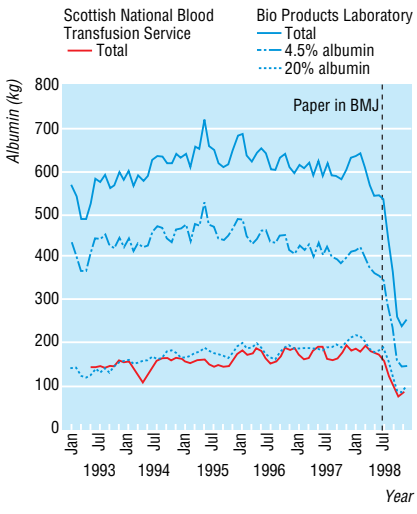
1 Wellwood J, Sculpher MJ, Stoker D, Nicholls GJ, Geddes C, Whitehead A, et al. Randomised controlled trial of laparoscopic versus open mesh repair of inguinal hernia: outcome and cost. *BMJ* 1998;317:103-10. (11 July.)
2 Correspondence. Laparoscopic versus open mesh repair of inguinal hernia. *BMJ* 1999;318:189-91. (16 January.)
3 Gold MR, Siegel JE, Russell LB, Weinstein MC. *Cost effectiveness in health and medicine*. New York, NY: Oxford University Press, 1996.

More on albumin

Use of human albumin in UK fell substantially when systematic review was published

Editor—After publication of the Cochrane Injuries Group Albumin Reviewers' systematic review of albumin administration in critically ill patients[1] the Committee on Safety of Medicines convened an expert working party to consider the implications for the use of albumin in the United Kingdom. To date the committee has not made any announcement. The results of the review were widely reported in the medical and lay press,[2] and this may have influenced the use of albumin.

We requested data on the monthly issues of albumin solutions to regional blood centres and hospitals between 1993 and 1999 from the Bio Products Laboratory (which serves England and Wales) and the Protein



Three month moving average of albumin issues from Scottish National Blood Transfusion Service between May 1993 and December 1998 and from Bio Products Laboratory between January 1993 and December 1998

Fractionation Centre of the Scottish National Blood Transfusion Service (which serves Scotland and Northern Ireland). Issues were expressed in kg of albumin, reflecting the total albumin content of the various dose units. A three month moving average of albumin issues was calculated.

From May 1993 to June 1998 albumin issues from the Scottish National Blood Transfusion Service increased by about 17%. In July 1998, after publication in the *BMJ* and Cochrane Library of the systematic review, issues fell steeply, from 180 kg in June to 62 kg in December (figure). Issues from Bio Products Laboratory had been stable from January 1994 to July 1998, after which they fell dramatically. By the end of December 1998 issues of albumin from the Bio Products Laboratory had levelled out, those of 4.5% albumin having dropped by 40-45% and those of 20% albumin by around 40% (figure).

The Protein Fractionation Centre's data reflect virtually all albumin used in Scotland and Northern Ireland. Data on Bio Products Laboratory's share of the market in England and Wales are not available.

Demand for albumin fell steeply after publication of the systematic review. This raises important questions about the alternatives being used—non-albumin colloids (gelatins, starches, dextrans) and crystalloid solutions. Although the review included trials comparing albumin with crystalloids, there should be some concern that albumin may have been replaced by non-albumin colloids as there is no compelling evidence that these are superior and these products may also have important adverse effects.[3 4] In view of the rapid and substantial changes in albumin issues there is a case for monitoring changing patterns of use of colloid and providing guidance for clinicians on fluid management.

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2 Nadel S, Marriage S, de Munter C, Britto J, Levin M, Habbibi P. Human albumin administration in critically ill patients. *BMJ* 1998;317:882-6. (26 September.)
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4 Schierhout G, Roberts I. Crystalloid verses colloids in the fluid resuscitation of critically ill patients: a systematic review of randomised controlled trials. *BMJ* 1998;316: 961-4.

Multicentre randomised controlled trial is needed before changing resuscitation formulas for major burns

EDITOR—The systematic reviews of the Cochrane Injuries Group Albumin Reviewers and of Schierhout and Roberts have raised doubts about the safety of colloids (particularly albumin) in the resuscitation of critically ill patients.[1 2] In this regional burns unit we have found that transferring units have changed their resuscitation policy in the light of these articles. In addition, the high profile of these studies may have resulted in clinicians adopting a legally defensible resuscitation policy.[3] We thus investigated the current practice of burns resuscitation in the United Kingdom and Republic of Ireland and assessed whether practice had changed after publication of these studies.

We sent a postal questionnaire to 32 units for burns or plastic surgery, or both, as listed in the directory of emergency and special care units. Twenty two units responded to the questionnaire (69% response). Of the respondents, 14 units used colloids in the resuscitation of major burns. A further four units had stopped using colloid in light of concerns raised by the systematic review of the Cochrane Group. Ten units used the Muir and Barclay formula, 10 the Parkland formula, and two both formulas.

In Law the Bolam principle states that "if a doctor is acting in accordance with a practice accepted as proper by a responsible body of medical men skilled in that particular art" then a doctor is not negligent.[4] We welcome the new data that the aforementioned systematic reviews present, but we reiterate the opinions of many of the respondents to our questionnaire in calling for a multicentre randomised control trial. Until this type of evidence is produced, the resuscitation of patients being transferred should be consistent. As most burns units use colloid based formulas clinicians should not feel compelled to change to new, unfamiliar resuscitation formulas.

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4 Bolam v Friern Barnet HMC. [1957] 2 All ER 118.

BMJ should cover health policies of all parties in Scottish election

EDITOR—In his interview with Christie, Sam Galbraith, the Scottish health minister, was reported as hoping to become the first health minister of the Scottish parliament if New Labour obtain a majority in the election on 6 May.[1] Despite the overtly political tone of this article and the fact that Scotland is in the middle of a hotly contested election, I have scanned the pages of subsequent journals in vain for similar cover being offered to Galbraith's principal opponents.

It is far from clear that New Labour will secure a majority in the Scottish parliament and possible that the Scottish National Party (SNP) may be the largest party. The SNP has distinct health policies (notably, opposition to private finance and active support for a strengthened public health agenda). The SNP's conference committed the party to using the parliament's tax varying powers to reverse the cut in income tax in the recent budget with the express intention of enhancing spending in health and education.

Press coverage in the rest of the United Kingdom of this historic election has been scanty and inadequate, but this should not excuse the *BMJ*. BMA members in Scotland are entitled to expect some serious coverage of the election and its major issues and, above all, evidence of an intention to offer political balance.

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1 Christie B. Health to get a higher priority in post-devolution Scotland. *BMJ* 1999;318:80. (9 January.)

We have covered the health policies of the different parties in this issue (see *News*).

Correction

Refugee doctors can do valuable work in European host countries

An error occurred in this letter by Wenzel (16 January 1999). Thomas Wenzel was not the sole author, as published, but Vesna Redic, Hemma Griengl, Alfred Pritz, and Peter Birner should have been listed as coauthors.