Living related liver transplantation: a Japanese experience and development of a checklist for donors’ informed consent

In the February 2002 issue of Gut, Broelsch et al argued for a controversial therapy of living related liver transplantation (Gut 2002; 50:143). The Japanese experience is somewhat different from those of other countries, as indicated in the article. Japan has long been the subject of sociocultural studies because of its delay in using the organs of brain dead persons for transplantation purposes. Since the Organ Transplant Law was enacted in 1997, only 16 liver transplant operations using brain dead donors have taken place. In contrast, more than 700 cases of liver transplants (with both children and adults as recipients) using living donors have been performed at Kyoto University Hospital, and more than 1000 such transplants have taken place in Japan.

The development of this medical procedure at our institute has entailed a strict self regulatory process.

(1) Each case is reviewed by an institutional professional committee that examines the medical indication. The transplant team prioritises the safety of donors, and no donor deaths have been reported so far.

(2) Informed consent obtained by transplant teams is reassessed by the institutional ethics committee to check for the absence of coercion and guarantee the right to refuse surgery until the last moment. The ethics committee has developed a checklist (table 1) and basically all donors are interviewed by a member of the ethics committee before surgery. Donor candidates are restricted to a spouse or relatives within the third degree of blood relationship.

(3) Information disclosure to media. In order to facilitate social acceptance of the procedure, relevant information continues to be disclosed to the press.

While these institutional efforts are essential, we suppose there are more substantial reasons for the striking increase in this type of surgery. One obvious explanation is the ascension in Japan to accept the concept of brain dead organ donors, but another may be the strong family bonds that are fundamental to Japanese culture. Traditionally raised in a family oriented society, Japanese people may not hesitate to give their organs to save a family member even if there is a small but perhaps fatal risk associated with the practice. This hypothesis needs further corroborated; however, on the other hand, many would assert that love for family is a universal value.

Hence we are faced with two academic questions: firstly, whether or not liver transplants using living donors will prevail to a similar extent in other countries where organ procurement from the brain dead is socially prohibited there; and secondly, whether or not this procedure can provide a solution to the lack of available organs in countries where organ procurement from the brain dead is permitted.

Japanese transplant surgeons are now going abroad to teach the living related liver transplant technique while patients and their family from countries where transplants from the brain dead are not permitted come to Japan to undergo living donor surgery. The situation described here clearly shows that while the world surgical community finds no shares advancements in techniques, regional and sociocultural values greatly influence their implementation.

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References

Endoscopic surveillance of premalignant gastric lesions

We read with interest the study by Whiting and colleagues (Gut 2002; 50:378–81). The study has further highlighted the importance of early detection of gastric cancer and also given further emphasis on ways to prevent the multistep progression in gastric carcinogenesis. However, we would like to make the following comments. Firstly, one in five patients in this group had lesions which, according to Whiting et al, should be followed up by yearly endoscopies. Despite the low acceptance rate in screening
programmes as noted by the authors, this would create an enormous workload on already over burdened endoscopic units. Clearly, further modes of selection of high risk patients with atrophy and metaplasia is desirable. Mutations in APC gene polymorphisms associated with increased cancer risk, such as interleukin 1 polymorphisms, are likely to be available in the near future. In addition, alteration in gastric secretion of pepsinogen may be used as an aid in early detection of premalignant lesions.

Secondly, the authors have not provided us with data regarding the Helicobacter pylori status of the patients. Their results may have been different if successful eradication of H pylori was achieved in the follow up group, a situation more relevant to current practice. It is now universally accepted that H pylori infection is the most important factor in gastric carcinogenesis with both host and bacterial virulence factors playing a role.

The European Helicobacter pylori Study Group strongly recommended H pylori eradication for patients with atrophic gastritis, after gastric cancer resection, and first degree relatives of patients with gastric cancer (presented at the Maastricht 2–2000 conference). There are emerging data that intestinal metaplasia may be replaced by normal gastric mucosa following H pylori eradication.

In summary, we feel that less invasive and more cost effective modes for detection and follow up of premalignant gastric lesions are required and hopefully are on the horizon. In the meantime, it appears that a screen and treat strategy for H pylori constitutes one of the most important interventions in the prevention of gastric cancer.

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References


Smoking and ulcer healing

We read with interest the paper by Wong et al (Gut 2002;50:322–5) on prediction of therapeutic failure in patients with bleeding peptic ulcer but are surprised they did not include smoking in their logistic regression analysis. The background prevalence of smoking is sufficiently high in western communities to be a useful marker if found significant. The association between smoking and ulcer healing and smoking and cardiovascular and respiratory disease raises the issue of whether smoking may be a risk factor both for ulcer rebleeding and mortality. It is recognised that cardiovascular and respiratory mortality is a substantial contributor to peptic ulcer disease related mortality. Addition of smoking may improve the predictive performance of their receiver operating curve and the value of their “model” in clinical practice.

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References


Oesophageal pH monitoring in Barrett’s oesophagus

We wish to comment on an interesting paper published previously in Gut which we inadvertently overlooked at the time. Fass et al (Gut 2001;48:310–13) reported that there was a positive correlation between percentage time that oesophageal pH was less than 4 in 24 hours and the length of the columnar lined segment in 15 patients with long segment Barrett’s oesophagus. Some years ago, we published data concerning 24 hour ambulatory oesophageal pH monitoring in untreated patients with Barrett’s oesophagus and compared the results with those obtained in patients with reflux oesophagitis but no Barrett’s oesophagus. pH monitoring was performed within one week of endoscopy. We found overlap in the 24 hour pH results between Barrett’s patients and patients with reflux oesophagitis but no Barrett’s oesophagus. Whilst performing reflux monitoring we noted that consideration should be given to treating patients with longer segments of Barrett’s oesophagus with higher doses of PPI. Moreover, Barrett’s patients with associated moderate to severe reflux oesophagitis should also be treated with higher PPI doses.

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References


Author’s reply

I would like to thank Drs Neumann and Cooper for their comments on our article on the correlation of oesophageal acid exposure with Barrett’s oesophagus length (Gut 2001;48:310–13). In recent years our laboratory has focused on factors that promote the development of Barrett’s oesophagus. Surprisingly, our understanding of the mechanisms that are responsible for the emergence of Barrett’s epithelium remains extremely poor. Despite the tendency in the literature to group
Influence of clinical factors, drug use, and food intake on the glutathione system

In a previous issue of Gut, Hoensch and colleagues (Gut 2002;50:235–40) using antral and duodenal biopsies, reported on a variety of factors such as sex, age, drug use, and food intake that influence the rate of change of glutathione and the activity of glutathione S-transferase. All of these factors either singly or in combination significantly affect glutathione metabolism within the gastric mucosa.

Curiously, one critical factor that may have influenced their measurements, namely Helicobacter pylori infection, was not mentioned in their paper. This omission is particularly important as the majority of the patients that these investigators examined had endoscopic findings strongly suggestive of infection with H pylori (gastric erythema, erosions, or ulcers). Previous studies by some of the coauthors in the Hoensch paper as well as by our group have clearly demonstrated that H pylori infection is associated with marked depletion by approximately 50% of reduced glutathione within the gastric epithelium, and that concentrations of reduced glutathione are restored to normal by eradication of H pylori. Failure to stratify patients for H pylori infection makes other conclusions in the study less compelling. Consideration of the presence of H pylori may explain why the antrum, the preferred site of H pylori colonisation, had the lowest concentration of reduced glutathione in the gastrointestinal tract. H pylori is well known to induce formation of reactive oxygen species (ROS), particularly in the antrum, and result in oxidative damage to DNA.1 Inflammatory host cells, such as activated phagocytic leucocytes, are the primary source of this oxidative stress, although H pylori per se may generate ROS and result in stimulation of oxidative signalling pathways in gastric epithelial cells. Recent evidence strongly suggests that levels of glutathione correlate inversely with parameters of acute and chronic inflammation in vivo.1,2 Thus attenuation of reduced glutathione in the gastric mucosa of H pylori infected patients may be due to both the direct effect of H pylori induced expression of oxidative signalling pathways and the associated inflammatory response.

Intra- and extracellular oxidative stresses induced by H pylori in association with depletion of glutathione and/or genetic polymorphisms of enzymes that control its metabolism may compromise normal epithelial cell function and enhance susceptibility to gastric cancers. In considering the gastric glutathione system, the effect of H pylori should not be ignored.

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References


Authors’ reply

We appreciate very much the comments made by Shirin et al concerning our publication (Gut 2002;50:235–40).

In our study (Gut 2002;50:235–40), we investigated a wide variety of factors which had not been evaluated entirely at the time this paper was written. In the meantime, the reported new findings of our group on H pylori were discovered in another patient population from the Netherlands.1,2 After we received the comments of Shirin et al, we looked again at the data of our patients from Germany to test for H pylori. We found that H pylori had a significant effect on one of the parameters of the gastrointestinal glutathione (GSH) system. The level of glutathione S-transferase (GST) A (alpha) in the antral mucosa was significantly depressed (p<0.05) in H pylori infected patients (4.8 (7.3)µg/mg cytosomal protein (n=63) vs 5.6 (6.9) µg/mg cytosomal protein (n=60)). The values given are means (SD) using the Wilcoxon test for comparison of means.

The status of H pylori infectivity was determined in the gastric mucosal biopsy specimens using the urease test which was read as either positive (H pylori present) or negative (H pylori absent) from the colour reaction (CLO test).

The other parameters (GSH concentration, GST enzyme activities) of levels of GST P (pi) and GST T (theta) were not affected in the antral and duodenal mucosa by H pylori status. The GST A level of the duodenal mucosa was also not significantly influenced by H pylori.

These results corroborate the findings published recently by our research group1 and by Shirin and colleagues.1 In our large group of patients from Germany, H pylori infection was associated with lower GST A levels in the antral mucosa. Eradication of H pylori was performed only in patients with ulcers and erosions but these patients were not followed up by endoscopy routinely. H pylori was the only factor that had a significant depressive effect on antral GST A level. H pylori had no influence on duodenal GST A, GST P, or antral GST T1, which confirms that vegetable and fruit stimulation of these enzymes was not confounded by H pylori.

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References

However, it has to be considered that *H. pylori* evaluation and eradication in patients from the Netherlands were done only in non-ulcer dyspepsia while patients from Germany comprised various pathological endoscopic diagnoses apart from non-ulcer dyspepsia. Our cross sectional study confirms that *H. pylori* seems to depress the GST A component of the enzymatic GSH system in the antral mucosa of the stomach. Depression of GST A levels could mean increased susceptibility of the stomach mucosa towards carcinogenic insults.

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References

**Mycobacterium avium subspecies paratuberculosis as a cause of Crohn’s disease**

The debate by Professor Quirke ([Gut 2001; 49:757–60]) was an interesting review of the hypothesis of a microbiological aetiology of Crohn’s disease. He indicates that “the hypothesis remains controversial and unproven.”

The point is that proof is never absolute, and indeed the objective of research is to disprove the hypothesis rather than to prove it, the latter being an impossible objective in scientific terms. He goes on to mention that “for the infectious disease hypothesis to be proved for any organism, Koch’s postulates need to be fulfilled.” This is not correct. Proof is pragmatic not absolute, and in practice it is the fulfillment of a set of predetermined objectives. Koch’s postulates are but an example of this, the Euclidian principle of *contradicta contrariis* and an extremely important development of scientific philosophy of the 19th century. Koch himself however recognised the weakness of his postulates in that although he felt that cholerla was microbiological in causation, he was unable to apply his postulates to it.

It is important to review Koch’s postulates and they are as follows:

1. “The specific organism should be shown to be present in all cases of animals suffering from a specific disease but should not be found in healthy animals”

This postulate demands a high level of sensitivity of laboratory methods and the clinicopathological identification of a specific disease—can Crohn’s disease be classified as such? At the time of Koch the important concept of a commensal microbe was not developed.

2. “The specific microorganism should be isolated from the diseased animal and grown in pure culture on artificial media.”

This demands laboratory methods which have not always been achieved at the present time.

3. “This freshly isolated microorganism, when inoculated into a healthy laboratory animal, should cause the same disease seen in the original animal”

Animal models are not always available for postulated microbial disease and it is recognised that transgenic transmission might cause a different disease.

4. “The microorganism should be re-isolated in pure culture from the experimental infection”

Once again, laboratory cultures are not always possible at present.

Koch was a great scientist and he recognised so well that there was more to microbiological explanation for disease than his postulates, which have a very high level of specificity but a very low level of sensitivity. I am afraid that in our approach to science we must look beyond Koch’s postulates for its “proofs” and we must rethink the concepts of proof for the newly recognised microbial diseases in the present century.

In that there is no such thing as absolute proof, science works in paradigms. These are models which come to be accepted as the best explanation of the phenomena that we see around us. However, there is no real paradigms of Koch’s disease. I remember farfetched “psychosomatic” concepts in the 1960s, to be replaced by food allergy during the latter part of the 20th century. But these paradigms have fallen into disfavour, being replaced by a lack of any clear idea of the type of disease that we are dealing with in respect of Crohn’s disease. Genetic factors are probably an influence only on susceptibility but not causation.

But in the treatment of patients clinical doctors require a paradigm on which to base explanations and understanding, treatment, and research. The nearest we have to a paradigm of causation of Crohn’s disease is that it is “inflammatory”, and so conforming to the allopathic principle of *contraria contrarias curantur* we give anti-inflammatory medications. The clinical manifestations of the disease are a direct result of the inflammatory process but is this a protective mechanism in itself? The assumption that it is only damaging led to the paradigm of “autoimmunity”, a concept which itself lacks “proof”, and indeed the criteria of proof in putative autoimmune disease have never been defined.

A paradigm of a microbial causation of Crohn’s disease could be based on two factors. The first of these is the statistical association between the disease and a putative microbe but the difficulty of this is the lack of robust detection methods for identification. The second is a plausible. It is interesting to reflect that for many years acute hepatitis was accepted as being a viral disease and indeed became known as “viral hepatitis”, well before the viruses had been identified. The plausibility was clear even though microbial science had not progressed so far to identify the viruses themselves. In respect of Crohn’s disease, we need to continue to think as to whether it is plausible that the disease might be microbiological, even in the absence of a definite microbe. The development of the paradigm and identification of a specific microbe are different scientific processes.

Plausibility is founded on existing knowledge and models, based on epidemiology and pathology, the main foundations of Western clinical medicine. What therefore do we think of the pathology of Crohn’s disease? Firstly, it is clear that Crohn’s disease is not a homogenous disease but a variety of different patterns of inflammatory disease of the intestinal tract. The hallmark of Crohn’s disease is firstly a patchy inflammation of the gastrointestinal tract, including perirectal and anal areas of skin. Granulomas are another hallmark and fissuring a third. We can go on in this way but the more criteria that we add, the more it would appear that the disease is a heterogeneous group. In this respect we cannot define Crohn’s disease, we do not really know what it is, and so a concept of causation is going to be based on a very fragile foundation.

However, we can make progress, especially if we look at the “classical” type of Crohn’s disease involving the right side of the colon, the caecum, and the terminal ileum, with fissuring and granulomatus disease. This type of disease looks very much like tuberculosis, so much so that if it presents in an Asian patient the disease is usually called tuberculosis whereas if it presents in a non-Asian patient it is usually called Crohn’s disease. One advantage of this and are happy to remain without a paradigm other than “inflammatory bowel disease”. Response to one or more given antibiotics cannot be laid down as a criterion of proof of microbial causation but could help strengthen a hypothesis. Although we can always be wrong, and indeed we often are, to be totally sceptical denies the opportunities for scientific progress. Research must be based on hypothesis and paradigm.
Modern Management of Cancer of the Rectum

This is a remarkable little book. A brief review of contributors will whet the appetite: a quick read of the first chapter by Mrs Shelton and Goldberg will soon confirm your decision to buy. This initial chapter is an engaging review of the key writings of the leaders of surgical thought over the centuries and provides a rare insight into how we have arrived where we are today. The book continues with the rich but often all too brief reviews of the many components of the colorectal cancer scene. This is the most important of all the human cancers as we already know enough to cure more people of bowel cancer than all of the other internal cancers put together. Nevertheless, even the most difficult of the disease have in common where knowledge may be incomplete: this book will provide a brief summary of what the surgeon must know about P53 or the medical oncologist about TME. The obvious and the necessary are mercifully omitted while the uncommon is usually well covered. Rare tumours, for example, are splendidly complete and the book provides valuable detail and formidable lists of references.

For any book the scene is moving too rapidly to be completely up to date. Details of the potential of magnetic resonance imaging (MRI) for example and the currently confused state of knowledge about who should have which type of radiotherapy. Nevertheless, even in these difficult areas, the writers have a constant sense of direction which will seldom be felt, even by an expert, to be off target. Seen through the eyes of a surgeon’s affectionate commentary on an area that will not commend itself to most serious oncologists, well aware of the strength of the argument for chemotherapy after colon cancer resections, nevertheless seriously doubt its value for rectal cancer. Minsky et al in an otherwise superb review of chemotherapy dismiss on grounds which I consider spurious the argument that better surgery may make some patients better managed without chemotherapy; they would personally prefer to read about honest controversy and to see current American dogma questioned rather than reinforced.

These few criticisms are offered as a surgeon’s affectionate commentary on an essentially splendid little book with something worthwhile for all serious doctors in the field of rectal cancer.

Management of Chronic Viral Hepatitis

Management of Chronic Viral Hepatitis is an A5 sized multi-author textbook of over 300 pages which forms one of eight books in a gastroenterology and hepatology series. Curiously, the only other hepatological title in this series is a book entitled Viral Hepatitis: Diagnosis, Treatment, Prevention by a different editor. The stated intention of the book is to bring the recent advances in clinical and basic research into the doctor’s office. Through the use of clinical vignettes, it tries to portray some of the recent advances in the treatment of viral hepatitis and to demonstrate how these treatments are incorporated into everyday practice. This is a good idea, which works well, particularly in those chapters concerning treatment. In addition to looking at the general treatment of viral hepatitis, the book also has informative chapters on specific disease subsets such as those with chronic hepatitis C and normal alanine aminotransferase levels or those with human immunodeficiency virus (HIV) and hepatitis C virus (HCV) coinfection. The authors include an interesting sounding chapter on alternative therapies but I believe this focuses primarily on conventional allopathic treatments that have been shown to be of little or no benefit for hepatitis C and disappointingly only touches on the frequently used alternatives such as herbal products and glycyrhrizin.

There are several chapters on hepatitis B virus (HBV) covering treatment, future treatments, management of HBV-related decompensated hepatic failure, and HBV-HBV coinfection. The chapter on the treatment of HBV covers the debate on interferon versus lamivudine or interferon and lamivudine combination therapy fairly well, but as these chapters there is surprisingly little reference to the management of the widespread pre-core mutant strain.

Additional chapters cover diagnostic techniques and some molecular virology. The chapter on HBV virology and the review of various molecular mechanisms that can be used as targets for antiviral treatment included in the chapter on future HCV therapy were particularly well written. The pace of change in viral hepatitis is fast, and as ever with multi-author texts, delays are inevitable between writing and publishing. There are several indicators that the publishers have tried to keep this delay to a minimum, such as the figures that have clearly been lifted straight out of someone’s powerpoint slide presentation, the references that are left in a reference manager format, and a few minor inaccuracies in the text. Despite these measures and the speed publication, there have been predictable advances in treatment that are not well covered, such as the rapidly accumulating data on the efficacy of pegylated interferon alpha in combination with ribavirin in the treatment of hepatitis C.

Despite these criticisms, there are a number of very good chapters and the book provides a good overview and a fairly up to date understanding of hepatitis and its management. The target audience is hard to define but anyone involved in looking after patients with viral hepatitis will find something of use. For those new to viral hepatitis this is a helpful textbook that shows how an understanding of both the natural history and treatment options should be used to guide management decisions.

Abdominal Ultrasound

Mike Stocksley moved from a career in clinical ultrasound to teaching and is now senior lecturer in the Faculty of Health at South Bank University. His background as an educator is readily apparent in this excellent book which for him was clearly a labour of love.

Despite the increasing complexity of investigations available, ultrasound remains an important tool in the investigation of abdominal pathology. Its ready availability and resulting popularity do not however imply that it is a straightforward or simple skill. It is probably the most operator dependent imaging modality, and mastery of the underlying concepts, proper performance of a scan, awareness of normal appearances, detection of relevant findings, and their correlation into a unifying diagnosis requires not only training but also extensive hands-on experience. These factors are often under appreciated by physicians, and if there is one thing guaranteed to aggravate the busy radiologist, it is a request for a “quick ultrasound” or for one to “just have a look”.

Mr Stocksley clearly appreciates the complexities of the topic and has produced a book which, while quite short, manages to be both practical and informative. The opening chapter covers the basics including choice of probe, use of coupling gel, patient preparation, and scanning positions. Then follows a straightforward explanation of the principles and applications of Doppler ultrasound; reading this chapter caused the reviewer to heartily wish that Mr Stocksley had been in close proximity while he was studying for his part 1 FRCR physics! Having dealt with the basics, the book proceeds with the nitty gritty of practical abdominal ultrasound and there are excellent chapters on the “usual suspects”: the liver, biliary tree, pancreas, spleen, and urinary tract, as well as...
more esoteric subjects such as the adrenal glands, muscle, and bowel. Each chapter is laid out similarly, with an initial description of functions and anatomy of the organ followed by the optimal scanning technique and normal ultrasound appearances before a discussion of pathology. The book is lavishly illustrated with over 250 illustrations, including line drawings, photographs to demonstrate scanning positions, and ultrasound images, with a nice balance between normal and pathological appearances. Advice boxes scattered throughout the text give useful tips on pitfalls to avoid, measures to improve scanning technique, and the relevance of findings.

Quibbles with this book are relatively minor. I would have welcomed a chapter on endoscopic ultrasound including endoanal; this area is underrepresented in the text. Also, one feels the clinical advice is in places oversimplified: for example, in a table on abdominal pain, stating that “pain in both left sides and right = cancer” is of limited value. The impression that this book is predominantly aimed at ultrasonographers in training is reinforced by emphasis on scanning positions, and ultrasound images, with a nice balance between normal and pathological appearances. Advice boxes scattered throughout the text give useful tips on pitfalls to avoid, measures to improve scanning technique, and the relevance of findings.

N Power

CORRECTION

Due to an error in the production process, parts B and C of figure 2 in the paper by Rueemmele et al in the December issue of the journal (Gut 2002; 51:842–8) were printed incorrectly. The figure is reprinted here.

NOTICES

Sir Francis Avery Jones BSG Research Award 2003

Applications are invited by the Education Committee of the British Society of Gastroenterology who will recommend to Council the recipient of the 2003 Award. Applications (TWENTY COPIES) should include:
- A manuscript (2 A4 pages ONLY) describing the work conducted
- A bibliography of relevant personal publications
- An outline of the proposed content of the lecture, including title
- A written statement confirming that all or a substantial part of the work has been personally conducted in the UK or Eire.

Entrants must be 40 years or less on 31 December 2002 but need not be a member of the Society. The recipient will be required to deliver a 30 minute lecture at the Annual meeting of the Society in Birmingham in March 2003. Applications (TWENTY COPIES) should be made to the Honorary Secretary, British Society of Gastroenterology, 3 St. Andrews Place, London NW1 4LB by 1 December 2002.

Broad Medical Research Program—Inflammatory Bowel Disease Grants

Funds for inflammatory bowel disease (IBD) research are available immediately from the Broad Medical Research Program of The Eli and Edythe L. Broad Foundation for innovative projects regarding etiology, therapy, or prevention. Grants totalling approximately US$100,000 per year are available for basic or clinical projects. Larger requests may be considered. Initial letter of interest (no submission deadline), simple application, rapid (60 day) peer review, and funding. Criteria for funding includes new ideas or directions, scientific excellence, and originality. Early exploratory projects, scientists not currently working in IBD, and/or interdisciplinary efforts are encouraged. Further information: Marciana Poland, Research Administrator, Broad Medical Research Program, 10900 Wilshire Blvd., 12th Floor, Los Angeles, CA 90024-6332, USA. Tel: +1 310 954 5091; email: info@broadmedical.org; website: www.broadmedical.org

The national register of hepatitis C infections with a known date of acquisition.

The register steering group invite clinical and epidemiological researchers to submit proposals to access data held in the register. It is envisaged that a variety of studies might benefit from linkage with or access to the register, and proposals from all specialties and institutions are welcomed. Any researchers interested in applying for access to information held within the national register should contact the register co-ordinator (see below) for a list of available data and an application form. Study proposals should then be submitted to the register co-ordinator by 16 December 2002.

Further information: Dr Helen Harris (Register Co-ordinator) or Ms Lisa Beck (Research Assistant), Immunisation Division, Communicable Diseases Surveillance Centre, Public Health Laboratory Service, 61 Colindale Avenue, London NW9 6EQ. Tel: +44 (0)20 8200 6686; fax: +44 (0)20 8200 7668; email: harris@phls.nhs.uk or lbeck@phls.nhs.uk

17th International Workshop on Therapeutic Endoscopy

This will be held on 3–5 December 2002 in Hong Kong. Further information: Professor SC Sydney Chung, Endoscopy Centre, Prince of Wales Hospital, Shatin, NT, Hong Kong. Tel: +852 2632 2233; fax: +852 2635 0075; email: info@hksde.org

Advances in the Inflammatory Bowel Diseases

This conference will take place on 6–7 December 2002 in New York, USA. Further information: Heather Drew, Imedex, 70 Technology Drive, Alpharetta, GA 30005-3969, USA. Tel: +1 770 751 7332; fax: +1 770 751 7334; email: h.drew@imedex.com; website: www.imedex.com

15th European Intensive Course (SMIER) Digestive Endoscopy

This course will take place on 16–17 December 2002 in Strasbourg, France. Further information: Michele Centonze Conseil, 6 bis Rue des Cendriers, 75020 Paris, France. Tel: +33 1 44 62 68 80; fax: +33 1 43 49 68 58.
The Future of Gastro-entero-hepato-pancreatolgy is bright

This Academic Farewell Symposium of Guido NJ Tytgat will be held on 12 December 2002 in Amsterdam, the Netherlands. Deadline for registration is 1 November 2002 (no registration fee) and registration should be done via email to: j.goedkop@amc.uva.nl.

Cancer of Oesophagus and Gastric Cardia: from Gene to Cure

This conference will be held on 13–15 December 2002 in Amsterdam, The Netherlands. Further information: European Cancer Centre, PO Box 9236, NL 1006 AE Amsterdam, The Netherlands. Tel: +31 (0)20 346 2547; fax: +31 (0)20 346 2525; email: ecc@ikca.nl

Imaging of the Abdomen: an Update

This will be held on 23–24 January 2003 in Amsterdam, the Netherlands. Further information: visit the website www.epgs.nl or email epgs@amc.uva.nl. Tel: +31 20566 3926/4386.

The Sheila Sherlock Memorial Symposium

Dame Sheila Sherlock, who died earlier this year, was responsible for creating hepatology at the Royal Free Hospital, London. This memorial symposium will take place on 26–28 January 2003 at the Royal Free Hospital, London, UK. Further information: Terri Dolan, Royal Free and University College Medical School, Royal Free Campus, Centre for Hepatology, Upper 3rd Floor, Rowland Hill Street, London NW3 3PF, UK. Tel: +44 (0)20 7433 2851; email: t.dolan@rfc.ucl.ac.uk

3rd Chester International Inflammatory Bowel Disease Meeting

This meeting will be held on 10–11 February 2003 in Chester, UK. An international programme includes speakers from the USA, France, Italy, and the UK, and will cover clinical problems, pathogenesis, medical and surgical treatment. Registration details and programme from: Professor Jonathan Rhodes, Department of Medicine, University of Liverpool, Daulby Street, Liverpool L69 3GA, UK. Tel: +44 (0)151 706 3358; fax: +44 (0)151 706 5832; email: rhodesjm@liverpool.ac.uk

Surgery of the Foregut

This meeting will be held on 17–18 February 2003 in Florida, USA. Further information: Cleveland Clinic Florida, Office of CME, 2950 Cleveland Clinic Boulevard, Weston, FL 3331, USA. Tel: +1 954 659 5490; (toll free: +1 866 293 7866); fax: +1 954 659 5491; email: cme@ccf.org

38th EASL Annual Meeting

The European Association for the Study of the Liver will be holding its 38th annual meeting on 29 March–1 April 2003 in Istanbul, Turkey. Further information can be found on the website www.easl.ch/easl2003.

International Symposium on Viral Hepatitis and Liver Disease

This conference will take place on 6–10 April 2003 in Sydney, Australia. Further information: ISVHLD 2003 Congress Managers, GPO Box 128, Sydney NSW 2001, Australia. Tel: +61 9622 2277; fax: +61 9622 3135; email: isvhld@tourhosts.com.au; website: www.tourhosts.com.au/isvhld
Influence of clinical factors, drug use, and food intake on the glutathione system

H Shirin, J T Pinto and S F Moss

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Updated information and services can be found at:
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