Table 1 Main demographic, clinical and laboratory features at admission in patients with cirrhosis with visceral leishmaniasis or bacterial infections

Parameter	VL cases (n = 11)	Bacterial infections (n = 33)	p Value
Age (years)	60 (51 to 62)	67 (64 to 71)	0.002
Time from onset of symptoms (days)	60 (47 to 120)	4 (2.5 to 5)	<0.001
Fever (˚C)	38.5 (38 to 39)	37.2 (36.5 to 37.8)	0.004
Spleen size* (cm)	17 (15 to 19)	15 (13.8 to 16.6)	0.04
Child to Pugh C (%)	2 (18)	6 (18)	NS
Child to Pugh B (%)	5 (45)	14 (42)	NS
Creatinine (mg/dl)	0.9 (0.85 to 1.05)	0.89 (0.70 to 1.2)	NS
AST (UI/l)	100 (35.5 to 183.5)	65 (39 to 120)	NS
Bilirubin (mg/dl)	1.2 (0.84 to 2.01)	2.49 (1.57 to 3.58)	0.004
Haemoglobin (g/dl)	10.3 (9.2 to 10.9)	12.4 (10.8 to 13.6)	0.003
White blood cells ($\times 10^3$)	2.9 (2.10 to 3.45	5.8 (4.2 to 8.0)	0.001
Platelets ($\times 10^3$)	88 (80 to 96.5)	78 (56 to 105)	NS
γ-Globulin concentration (g/dl)	3.5 (3.2 to 4.4)	1.93 (1.61 to 2.52)	<0.001
Erythrocyte sedimentation rate (mm/h)	105 (94 to 110)	28 (20 to 49)	0.005
Number positive for anti-Leishmania antibodies†	11	0.00	<0.001

Quantitative data are expressed as median (interquartile range) and compared using the Mann to Whitney U test. Fisher's exact test was used to compare qualitative variables.
*As measured by ultrasonographic examination.
†Anti-*Leishmania* antibodies were negative in 51 additional consecutive patients with cirrhosis without infections and γ-globulins above 2.5 g/dl.

Competing interests: None.

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Magnifying videoendoscopic findings of Peyer's patches in the terminal ileum of Crohn's disease

It has been reported that Crohn's disease initially occurs as tiny aphthoid lesions at the sites of lymphoid follicles in the gastrointestinal tract.[1–3] The follicle-associated epithelium (FAE) of the gut-associated lymphoid tissues such as Peyer's patches (PPs)[3 4] is a single layer of epithelial cells covering each follicle and forms a dome between the surrounding villi.[3 4] Endoscopic observation of PPs in patients with Crohn's disease has rarely been performed in clinical settings.[1–3 5 6]

A total of seven patients with active Crohn's disease and 19 age- and sex-matched healthy controls were enrolled. Chromoendoscopy was carried out with crystal violet and/or indigo carmine to identify PPs. The FAE on the domes of PPs was examined by magnifying endoscopy. The macroscopic appearance of PPs was classified into two categories, a nodular or convolute elevation pattern (E type, fig 1A) and a flat pattern (F type, fig 1B), corresponding to lymphoid follicle and lymphocyte aggregation types, respectively, as described by Fujikura *et al*.[7] E-type PPs are associated with definite lymphoid follicles and abundant lymphoid hyperplasia, whereas F-type PPs consist of aggregated lymphocytes and reticulum cells, which were loosely mixed together.[7] Two endoscopic biopsy specimens taken from the domes of PPs were subjected to histopathological analysis and scanning electron microscopy.[3] All patients gave their written informed consent after approval by the university ethics committee.

The seven patients with Crohn's disease (four men and three women) had a mean age of 26 years (range 16–42 years). Six patients had minimal lesions including small ulcers and erosions within the PPs. There were 11 E-type and 8 F-type PPs in the control group, whereas all the PPs in patients with Crohn's disease were classified as F type. On magnifying chromoscopy, most of the domes within PPs in controls rose into a little mound and were surrounded by dense villi (fig 2A). However, flat, distorted domes, surrounded by scattered villi (fig 2B), were identified in six patients with Crohn's disease. Repeat endoscopy in remission stage after total parental nutrition or enteral feeding with an elemental diet showed that the irregularity of domes improved in four of the six patients with Crohn's disease, accompanied by densely surrounding villi, albeit the appearance of the PPs remained of E type. A non-caseous epithelioid granuloma was histopathologically seen in six of seven patients. On electron microscopy, M cells were seen on the domes in all cases.

PPs of Crohn's disease were exclusively categorised as F type, whereas E type was predominant in the age- and sex-matched controls. On observation by magnifying endoscopy, most patients with Crohn's disease had irregularly even domes surrounded by sparse villi. Initial lesions of Crohn's disease are postulated to be aphthous erosions of the domes in PPs,[6] and we identified some erosions on the domes' FAE. Taken together, the F-type PPs in Crohn's disease can reflect the irregularly affected domes with few covering villi. Thus, the FAE of patients with active Crohn's

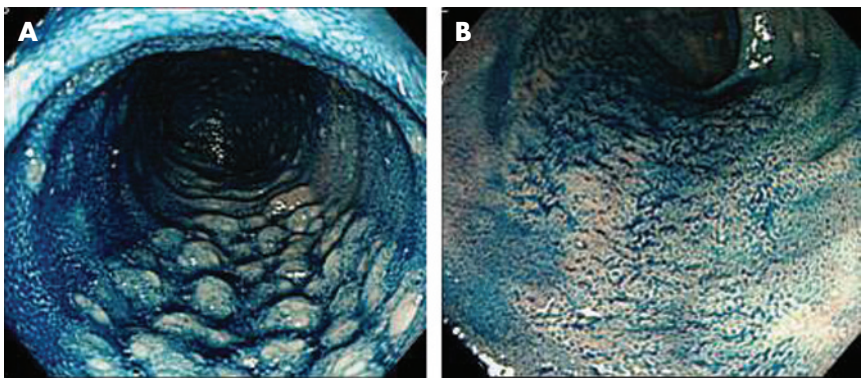

Figure 1 Chromoendoscopic view with a magnifying videocolonoscope (Olympus CF-240ZI, indigo carmine and crystal violet for (A) and (B), respectively). Nodular elevation of Peyer's patches (E type) and flat Peyer's patches (F type) for (A) and (B), respectively.

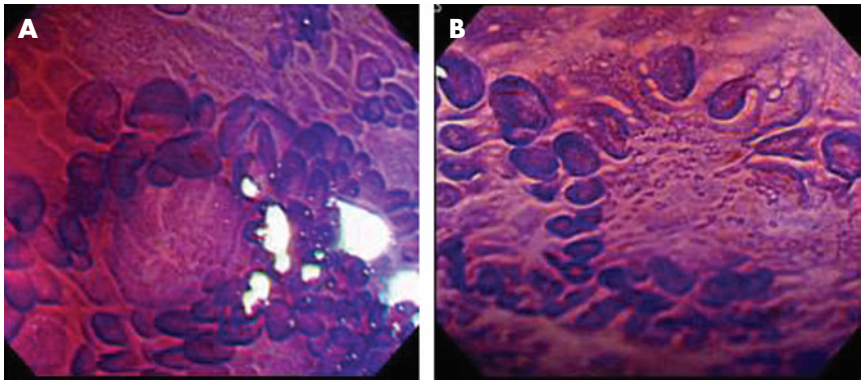

Figure 2 Magnifying chromoscopic view. (A) Domes in the Peyer's patches of a control subject, surrounded by dense villi. (B) Irregularly even domes in the Peyer's patches of a patient with Crohn's disease, surrounded by scattered villi.

disease is likely to be more exposed to the luminal antigens and to be in closer contact with the immune system.[4] Notably, the non-caseous epithelioid granuloma was frequently identified in the biopsy specimens taken from PPs. Such minimal Crohn's disease lesions may originate from PPs and may be related to gut-associated lymphoid tissues underlying the FAE. It has been postulated that M cells are related to the pathogenesis of Crohn's disease through their function as a portal of entry for potentially pathogenic agents.[4] In fact, M cells were detected exclusively in the FAE on electron microscopy. It is difficult to obtain M cells by conventional endoscopic biopsy, because they are located on the domes but not in the villi of PPs.[3 4] Therefore, magnifying endoscopy is useful to clearly recognise the FAE of the domes.

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Internationalisation of high-impact gastroenterology journals, 1970–2005

Recent decades have seen an increase in publications in English from the international community in basic science journals, as well as in general and specialty medical journals.[1–6] However, to date, no one has examined the international publishing trends in gastroenterology and hepatology journals. We examined the extent of internationalisation in this field with regard to high-quality research publications over the period 1970–2005. Additionally, earlier studies discussing internationalisation of biomedical literature did not deal with the impact of multinational collaborations (articles involving authors from two or more countries). Thus, our secondary aim was to describe changes in multinational research publications during this period.

We reviewed the three highest-ranked gastroenterology journals based on journal impact factor and total literature citations for 2005: *Gastroenterology*, *Hepatology* and *Gut*.[7] We collected data for every fifth year over the period 1970–2005. All issues (January through December) of the journals were retrospectively reviewed for each of the selected years, and all basic and clinical research articles involving original investigation were analysed. The nation of origin of each article was assigned based on the affiliation of its investigators. Additionally, articles were classified as national or international, with national articles defined as those published by authors from the country of publication for the journal (*Gastroenterology* and *Hepatology*—USA; *Gut*—UK); international articles were those published by authors from all other countries.

A total of 3769 research articles published in the two US-based journals and 1589 articles published in *Gut* were analysed. Figure 1A shows the proportion of national and international publications for the three journals collectively. The proportion of international articles in the journals increased significantly from 31.0% of all articles in 1970 to 67.6% in 2005. The countries most responsible for the increases in international publications were Germany (0.3% of all articles in 1970, rising to 9.9% in 2005), Japan (0.3 to 9.8%), France (0.7 to 6.1%) and Italy (0.3 to 5.3%). When journals were considered individually, the internationalisation of *Gut* was the most dramatic, with international articles representing 34.4% of all articles in 1970 and 83.4% in 2005.

A significant increase in the number of multinational collaborative publications occurred during the study period. For example, in 1970, collaborations comprised 0.7% of all research articles in *Gut*, compared with 6.8% in 1990 and 24.6% in 2005. Similar trends were seen in *Gastroenterology* and *Hepatology* (fig 1B).

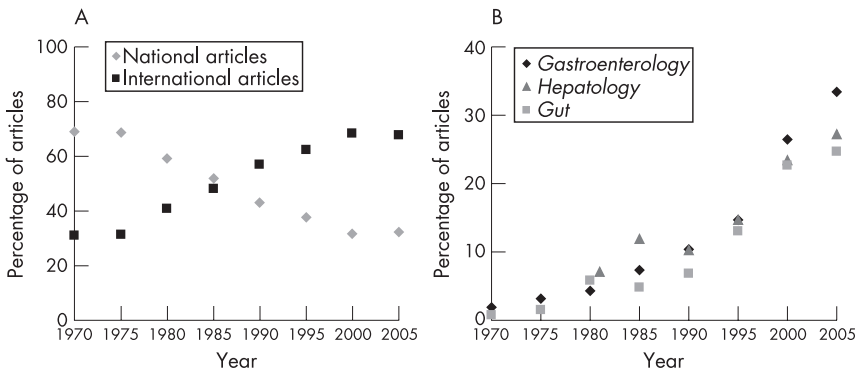

Figure 1 Proportion of (A) national and international research articles for the three journals collectively and of (B) multinational collaborative publications in the three top-rated gastrointestinal journals.