baroreflex reset may account for the re-establishment of responsiveness to routine antihypertensive treatment after nitroprusside. Hypertensive emergencies are the only current indication for nitroprusside. Our experience suggests that periodic intravenous nitroprusside infusions can be a useful tool, possibly life-saving, in the treatment of resistant hypertension. However, this treatment is safe only if the drug dosage is controlled by an infusion pump and if BP is monitored during the infusion.

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SCREENING FOR HEPATITIS C VIRUS ANTIBODY

SIR,—The flurry of publications on hepatitis C virus (HCV) in *The Lancet* of Aug 5, including an excellent editorial, comes as no surprise.

We agree that the Ortho ELISA for anti-HCV is specific for the major agent causing post-transfusion non-A, non-B hepatitis (NANBH): it is clearly superior to all previous attempts at an assay for NANB virus and provides a welcome advance over surrogate markers for infection with this virus. However, in the context of donor screening, precipitate action should be avoided. As in any other assay, the predictive value of a positive result hinges on the prevalence of the marker in a given population. While the test scores well in panels of well-characterised NANB hepatitis sera and in samples from patients with a diagnosis of NANB hepatitis, we do not know the predictive value of the test in low prevalence populations, such as UK blood donors. We must have confirmatory assays to eliminate, for example, cross-reactivity with yeast antigens before sensible policies for generalised screening of blood donations can be implemented.

We have evaluated the Ortho ELISA for anti-HCV on behalf of the National Blood Transfusion Service. 0·5–1% of blood donations have been found to be repeatedly reactive. Excluding such blood donors might not seem to be a problem. However, the UK has an annual 2·5 million blood donations, and contacting and counselling 12 500–25 000 donors would be an enormous and costly undertaking, especially when the significance of a positive test in a healthy person is as yet unknown.

The test takes at least 3 h; its introduction in routine donor screening would be logistically difficult. The release of components such as platelet concentrates, especially those collected by apheresis, would be considerably delayed. Testing time and the need for a confirmatory assay should be considered when evaluating the cost-effectiveness of routine donor screening.

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SIR,—Whilst we share the views of your Aug 5 editorial on the importance of the new detection systems for HCV antibodies, especially in the context of screening blood donations, we take issue with the last point made by Professor Kühnl and colleagues in the correspondence section (p 324) of the same issue.

The apparent absence of a confirmatory test will cause serious problems for blood transfusion services, which are likely to bear the brunt of sensitive donor counselling. A repeatably reactive ELISA test is suggestive but not definitive evidence for antibody. We accept that the existing difficulty (use of the same antigen) is scientifically less than satisfactory, but it is better than nothing. Ortho Diagnostic Systems should make available, as a matter of urgency, appropriate reagents and/or tests so that even when an identical antigen is used, assay systems that are fundamentally different from the marketed ELISA screening tests can be used for confirmation testing. Of no less importance for blood donors, as you have indicated in your editorial, is the need for Ortho and/or Chiron to deposit the sequence of the viral genome in the GenBank database. These matters are so important that they should be taken up by Government health departments. In view of the impending European legislation on blood transfusion, European governments are especially well placed to coordinate such actions.

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TIME-RESOLVED FLUOROIMMUNOASSAY FOR CAMPYLOBACTER PYLORI ANTIBODIES

SIR,—Dr Loffeld and colleagues (May 27, p 1182) suggest that an ELISA test for *Campylobacter pylori* antibodies might replace endoscopy in the diagnosis of gastritis associated with this bacterium. However, with a cut-off of optical density (OD) greater than 2·1 the ELISA had a specificity of 100% and a sensitivity of 85·4%; at a lower cut-off (OD above 1) the sensitivity was 100% but the specificity fell to 72·7%.

We have evaluated a time-resolved fluoroimmunoassay (TR-FIA), to detect *C pylori* antibodies. This test is based on the labelling of antibodies with europium (Eu) and conversion of the specifically bound non-fluorescent label to highly fluorescent chelate solution, followed by measurement with a time-resolved fluorimeter.[1] TR-FIA was compared with ELISA.

DISTRIBUTION OF TR-FIA VALUES

TR-FIA (cps)	*C pylori* +ve	*C pylori* −ve
1000–2000	0	15 *(57·7%)*
2001–3000	0	11 *(42·3%)*
3001–4000	0	0
4001–6000	31 *(30·7%)*	0
6001–8000	16 *(15·8%)*	0
8001–10 000	29 *(28·7%)*	0
Over 10 000	25 *(24·8%)*	0

We tested sera from 101 patients with histologically proven gastritis, all positive for *C pylori* by culture, and from 26 individuals with microscopically normal gastric mucosa in none of whom *C pylori* was detected. The antigens used were the surface components of ten *C pylori* strains, harvested by an acid wash.[2] TR-FIA was carried out by the procedure described by Aceti et al,[3] with as conjugate swine anti-human-IgG, Eu-labelled (Pharmacia, LKB Wallac). The concentrations of reagents were determined by chequerboard titrations. For the ELISA[2] a cut-off value of mean + 2SD was chosen.

The distribution of counts per second (cps) in TR-FIA (table) shows that a cut-off of 4000 cps totally discriminates positive from negative specimens. By contrast, the ELISA test had a sensitivity of 89% (90/101) and a specificity of 70% (20/26). TR-FIA was more sensitive ($p = 0·002$) and more specific ($p = 0·003$) than ELISA.

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