

the former Yugoslavia—and particularly besieged areas—to offer help with the specific surgical and medical problems. Humanitarian Aid with Medical Deployment is now organising specialist surgical teams to visit Bosnia for periods of seven days to work on specific problems such as nerve injuries, joint contractures, and complex fractures that have failed to unite. This plan should be pursued during the winter months and volunteers, either individuals or teams, are very welcome.

Professor Dudley was told in Vietnam that his teams would “be remembered in the marketplace,” and we can assure any volunteer that this was exactly our experience in Bosnia. Volunteers should not expect to make a large contribution, but they will inestimably raise the morale of the local medical professionals and their patients.

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1 Villar R. Sarajevo, I salute you. *BMJ* 1993;307:876-7. (2 October.)

2 McCorkindale L. Home. *BMJ* 1993;307:877. (2 October.)

3 Dudley H. Lessons from Vietnam. *BMJ* 1993;307:872. (2 October.)

### Operation Irma acted as a catalyst

EDITOR,—I wish to clarify some issues concerning the airlifting of patients from Sarajevo to Britain (“operation Irma”). Patients were evacuated from Sarajevo last August at the request of doctors and patients in Sarajevo. Those doctors, the United Nations High Commissioner for Refugees, and the Overseas Development Administration’s medical team did not leave until they agreed that all the patients in both the state and Kosovo hospitals who needed urgent medical care abroad would be on the airlift. We neither selected nor refused people, accepting all who were put forward.

Evacuation of a patient is complex, and the agreement of both the patient and the Bosnian authorities is required before the United Nations High Commissioner for Refugees can begin the search for a country that will agree to take the patient. Even when countries have been found for the patients, the logistics of gathering patients and transporting them through a war torn city that is constantly under fire are considerable, and the journey to the airport through several front lines is dangerous; the plane can also become a target if it is thought to be carrying enemy soldiers, wounded or otherwise.

Operation Irma was part of a continuing programme of humanitarian aid to the former Yugoslavia by the British government. The Overseas Development Administration has been foremost in supplying medical and humanitarian aid to the people of Bosnia throughout the conflict and has made extraordinary efforts to ensure that aid is targeted at the needs and requests of those who live there.

The situation in the former Yugoslavia is complex and tragic, and the information given to, and the impressions gained by, those who visit for short periods can be conflicting and confusing. In some circumstances medical teams are needed, requested, and supplied, but in others medical supplies alone are the most appropriate form of aid. I have also, however, received personal pleas from doctors whom I know well to evacuate patients who cannot be treated in Sarajevo—because of the desperate circumstances imposed by the war—whatever aid is available. No single solution will suffice. We are all trying to help.

Operation Irma helped people in desperate need and acted as a catalyst to increase the offers of

refuge from other countries. Of course, it was not enough: only peace is enough. Until this comes about, however, we shall continue to offer our help whenever and however it is requested.

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### Childhood drownings

EDITOR,—As the father of a 17 month old victim of a drowning accident I endorse Victor F Carey’s appeal for legislative measures but believe that legislation should also be applied to garden ponds. There are many more ponds than swimming pools in Britain, and they tend to be much less visible. The many nature and gardening programmes on television and radio extolling the virtues of ponds seldom mention the dangers to children. Six years after the drowning my neighbour’s pond remains unprotected.

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1 Carey VF. Childhood drownings: who is responsible? *BMJ* 1993;307:1086-7. (30 October.)

### Oral cholera vaccine well tolerated

EDITOR,—The live attenuated, oral, candidate cholera vaccine (designated CVD 103-HgR) was developed through recombinant techniques resulting in an organism that expresses the non-toxic but immunogenic B subunit of the cholera toxin.<sup>1</sup> Randomised, double blind, placebo controlled studies with CVD 103-HgR have shown the vaccine to be well tolerated and highly immunogenic in volunteers from non-endemic areas.<sup>2,3</sup>

Cholera is a disease of low risk to travellers, and existing parenteral vaccine is of low efficacy. In a minority of travellers vaccination is justifiable on the grounds of increased risk (for example, in health and teaching workers and those in close contact with the local communities in highly endemic areas) or for certification where border officials are demanding proof of immunisation.

Oral cholera vaccine (CVD 103-HgR) was offered on an unlicensed, named patient basis to such travellers attending British Airways travel clinics and certain occupational health departments. Travellers receiving the vaccine were asked to complete and return a questionnaire one week after ingesting the vaccine to assess adverse effects associated with the vaccine.

Between February and August 1993, 434 doses of CVD 103-HgR were administered and 277 questionnaires were returned (a response rate of 64%). The results are summarised in the table.

#### Adverse events associated with CVD 103-HgR oral cholera vaccine

Adverse event	No (%) given oral cholera vaccine only (n=110)*	No (%) given cholera vaccine and one or more parenteral vaccines (n=167)†	Total (n=277)
Diarrhoea	9 (8)	14 (8)	23 (8)
Stomach cramps	6 (6)	8 (5)	14 (5)
Nausea	7 (6)	18 (11)	25 (9)
General malaise	9 (8)	18 (11)	27 (10)
Fever	2 (2)	5 (3)	7 (3)
Headache	2 (2)	6 (4)	8 (3)
Muscle aches		3 (2)	3 (1)
Thirst	1 (1)		1 (<1)
Mouth ulcers		1 (1)	1 (<1)
Cervical lymphadenopathy		1 (1)	1 (<1)

\*26 subjects (21%) reported one or more adverse event.

†53 subjects (32%) reported one or more adverse event.

Diarrhoea, nausea, and abdominal cramps are not commonly associated with parenterally administered vaccines, and are therefore likely to relate to CVD 103-HgR. Where present, such adverse effects were generally reported as mild and non-debilitating. There were no reports of serious or life threatening adverse events. The incidence of gastrointestinal adverse effects in this study was higher than in previous studies, but there was no placebo group to aid in the differentiation of “background” adverse events.

Our experience is that the live, attenuated oral cholera vaccine (CVD 103-HgR) is well tolerated by travellers from the United Kingdom. When adverse effects are noted they are infrequent and mild. CVD 103-HgR provides an attractive alternative to the parenteral vaccine, which has limited efficacy and is associated with a relatively high rate of adverse events.

It is worth noting that the oral cholera vaccine CVD 103-HgR is unlikely to provide protection against the recently identified epidemic non-O1 strain *Vibrio cholerae* 0139 (“Bengal cholera”).

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1 Levine MM, Kaper JB, Herrington D, Kettley J, Lososky G, Tackett CO, *et al.* Safety, immunogenicity and efficacy of recombinant live oral cholera vaccine CVD 103 and CVD 03-HgR. *Lancet* 1988;ii:467-70.

2 Cryz SJ Jr, Levine MM, Kaper JB, Furer E, Althaus B. Randomized double-blind placebo controlled trial to evaluate the safety and immunogenicity of the live oral cholera vaccine strain CVD 103-HgR in Swiss adults. *Vaccine* 1990;8:577-80.

3 Kotloff KK, Wasserman SS, O'Donnell J, Lososky GA, Cryz SJ, Levine MM. Safety and immunogenicity in North Americans of a single dose of live oral cholera vaccine CVD 103-HgR: results of randomized, placebo-controlled, double-blind cross-over trial. *Infect Immun* 1992;60:4430-2.

### Chronic constipation in elderly patients

EDITOR,—A P Passmore and colleagues recommend use of a senna-fibre combination rather than lactulose to treat constipation in long stay elderly patients because of the combination’s increased efficacy and cost effectiveness.<sup>1</sup> Lactulose, however, has benefits in addition to its laxative effect for long stay elderly patients, and we urge that its use is not discounted for these people.

Apart from its use in managing portosystemic encephalopathy lactulose has an antiendotoxin action, can be used to treat salmonella and shigella carrier states,<sup>2</sup> and has an infection limiting action.<sup>3,4</sup> Lactulose also lowers the rate of urinary tract infection and a corresponding reduction in the number of prescriptions of antibiotics,<sup>5</sup> probably owing to a change in the balance of the colonic