

## HIV transmission, travel, and Thailand

EDITOR.—The steep rise in the prevalence of HIV infection in Thai prostitutes since 1989 and the spread of infection into other groups of heterosexuals in that country has been reported.<sup>1</sup> The potential therefore exists for heterosexual transmission of HIV infection to British people who engage in unprotected sexual intercourse with new partners while visiting Thailand. Such transmission is now occurring at an increasing rate.

Before 1989 there had been only two reports to the Communicable Disease Surveillance Centre of HIV infection attributed to heterosexual sexual exposure in Thailand. Since then 22 reports have been received of cases in which sexual intercourse between men and women in Thailand was the likely mode of HIV infection; 17 of these were reported in 1991 and 1992. These reports relate to 21 men and three women aged 24 to 50. They were received from 20 centres located throughout England and Wales. At the time of the report nine people were asymptomatic, five were symptomatic but without an AIDS indicator disease, and four had AIDS; clinical information was unavailable for six.

These data are mainly based on laboratory reports, and it is impossible to be certain that no other risk factors for HIV infection were present. Nevertheless, intercourse with new partners (including prostitutes) in Thailand was mentioned in 18 reports.

Travellers who have unprotected sex risk becoming infected with other sexually transmitted diseases besides HIV infection. Reports of such infections acquired by travellers in the Far East include hepatitis B (2% (10/508) of acute infections in adults in England and Wales in 1991 reported to the Communicable Disease Surveillance Centre were acquired in Thailand); penicillin resistant gonorrhoea; and chancroid.<sup>1</sup>

Rates of HIV infection are high or rising in many countries. The need for travellers, especially sex tourists, to receive appropriate information and counselling on safe sexual and other behaviours before travel has been emphasised.<sup>1,5</sup> Many agencies are in a position to provide advice or information: local health service staff, travel agents, travel clinics, and airlines. Travellers need to be motivated as well as informed to avoid risk behaviours for HIV infection. Our data serve as a reminder that returning travellers who have been at risk of sexually transmitted diseases should be encouraged to have an HIV test.

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## Recommendations for pacing

EDITOR.—We were interested to read M A de Belder and colleagues' description of permanent pacemaker implantations at St George's Hospital, London, in 1991,<sup>1</sup> and we support their comments concerning the serious cost implications of implementing the British Pacing and Electrophysiology Group guidelines.<sup>2</sup> In our regional unit in 1991, 402 patients underwent permanent pacemaker implantation (see table). Of the 323 single chamber systems implanted, 35 (10.8%) included a rate responsive unit and nine (2.8%) were atrial single chamber systems. The total cost (including VAT) of all pacemaker hardware implanted was £437 230, of which dual chamber systems accounted for £164 730 (37.7%). The mean costs of a dual chamber system, a rate responsive single chamber system, and a fixed rate single chamber system were £2085, £1425, and £773 respectively.

Permanent pacemaker implants at John Radcliffe Hospital, Oxford, 1990-2. Figures are whole numbers (percentages)

	1990	1991	1992*
Total implants	387 (100.0)	402 (100.0)	452 (100.0)
Single chamber	321 (83.0)	323 (80.3)	285 (63.1)
Dual chamber	66 (17.1)	79 (19.7)	167 (36.9)
Patients ≥ 75 years	220 (56.8)	264 (65.7)	313 (69.3)
Dual chamber systems in patients ≥ 75 years	14 (6.4)	22 (8.3)	41 (13.1)

\*1992 Figures projected for whole year from those at 1 October 1992.

In Oxford, as in other British regional centres,<sup>1</sup> the use of dual chamber systems has been increasing, particularly since the British Pacing and Electrophysiology Group published its recommendations in 1991.<sup>2</sup> This increase has been reflected in older age groups, but we agree that complete adherence to the pacing and electrophysiology group's "optimal" recommendations would create a large increase in hardware costs, in operating time, and in the work of the regional centre in following up pacemaker patients. It is widely accepted that atrial demand or dual chamber pacing is superior to ventricular demand pacing.

The benefits result from increased cardiac output and rate responsiveness arising from synchronous atrioventricular contraction and P wave tracking, with a consequent reduction in the occurrence of the pacemaker syndrome.<sup>3,5</sup> We do not know whether elderly patients (who make up over 60% of our patients) require the benefit of a dual chamber or rate responsive system. A tendency to a more sedentary lifestyle may reduce the benefit from physiological pacing. Conversely, the impaired responsiveness of cardiovascular reflexes and concurrence of other cardiac disease may make the symptomatic benefit of such a

system even more important in elderly people than in younger patients.

Pacemaker prescription should be based on a knowledge of which patients stand to benefit the most from a more complex pacing system, rather than on the age of the patient. The increased use of atrial pacing in appropriately selected patients with sinoatrial disease without atrioventricular block would increase the number of patients with a physiological pacing system without adding significantly to overall costs.

We need further research into the effects of dual chamber pacing in elderly patients and into factors which may identify a subgroup in all age groups who will benefit most from dual chamber pacing. Meanwhile, implanting even an "expensive" dual chamber system remains an extremely cost effective treatment in reducing morbidity and extending life expectancy. Furthermore, the morbidity and functional limitation arising from using an inappropriate pacing mode may be being underestimated.<sup>6</sup> The hidden costs incurred as a result of this morbidity need to be taken into account when calculating the "savings" which could be made by minimising the numbers of complex pacing systems which are implanted.

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EDITOR.—M A de Belder and colleagues project the costs of implementing the British Pacing and Electrophysiology Group's recommendations for pacemaker implantation.<sup>1,2</sup> They suggest that full implementation would increase the cost of pacing by 54-75% and also estimate that if full implementation was restricted to patients under 75 the increased cost would be about 18%. Pacing practice at the University Hospital of Wales was audited in January 1991, and because of changes in our practice in patients under 70 we have been able to achieve 77% implementation of the group's recommendations at an increased cost of 23%.

Between 1 January and 31 December 1991, 296 patients received first implants (all changes of pacemaker boxes were excluded). They were aged 29-96 (mean 73); 219 were older than 70 and 157 were older than 75. The distribution of diagnostic