LETTERS TO THE EDITOR

HIV diagnosis delay in Antwerp, Belgium

SIR — Early diagnosis of HIV infection has many advantages; it allows timely prophylaxis against opportunistic infections such as *Pneumocystis carinii* and *Mycobacterium tuberculosis* and early recognition and treatment of HIV related complications. Moreover, counselling of people with HIV infection may reduce the further spread of the epidemic. Early diagnosis of HIV infection also has certain disadvantages; it may cause extra stress to the individual and lead to discrimination against them. We investigated

Table 1 Number of persons (percentages) with a CD4 lymphocyte count <200/ μ l at HIV diagnosis seen at the in- and outpatient department of the Institute of Tropical Medicine, Antwerp, 1985–1991.

1985	1986	1987	1988	1989	1990	1991
19 (32%)	17 (28%)	15 (18%)	23 (28%)	18 (28%)	30 (29%)	22 (22%)

whether in Belgium there is a tendency towards earlier diagnosis of HIV infection than in the early years of the HIV epidemic.

The medical records of all patients with HIV infection who attended the Institute of Tropical Medicine as inpatients and outpatients between 1985 and 1992 were reviewed. The CD4 lymphocyte counts at the time of HIV diagnosis were noted. If counts at diagnosis were not available, these were calculated on the basis that they generally fall 80 cells/ μ l per year.¹

The medical records of 583 persons (443 (76%) men and 140 (24%) women) were reviewed. Altogether 344 patients (59%) were Belgians and 173 (30%) Africans; 324 (56%) had acquired HVI infection through heterosexual contact, 190 (33%) through homosexual contact, 21 (4%) through the use of intravenous drugs, and 10 (2%) through transfusion of blood or blood products. In 504 (86.5%) of the patients CD4 lymphocyte counts had been performed within one year of HIV diagnosis.

Despite new treatments and information campaigns about HIV, there was no significant decrease in the delay over HIV diagnosis between 1985 and 1991 in this hospital. The percentage of people whose CD4 lymphocyte counts were below 200/ μ l at diagnosis ranged from 18 to 32% (table). No significant differences in diagnosis delay were observed according to sex, race, nationality, and risk factor for HIV infection.

Certainly our study population is not representative of those with HIV infection in Belgium. Because we are an HIV reference centre, patients may be referred to this institute in more advanced stages of the disease.

An important diagnostic delay has also been observed in other countries. In a study performed in Western Australia, for example, 61% of the patients presenting with an AIDS defining condition in 1988 had been unaware of their seropositive status two months or less before AIDS was diagnosed,

this figure decreased over time but remained relatively high in 1991 (38%).² In a study performed in England and Wales, 49% of the patients who presented with an AIDS defining condition in 1989 had been unaware of their seropositive status nine months or less before AIDS was diagnosed. This figure fell over time but was still 43% in 1992.³

The reasons for diagnostic delay should be studied in order to rectify this situation.

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- 1 Laurikka J, Sisto T, Auvinen O, Tarkka M, Läärä E, Hakama M. Varicose veins in a Finnish population aged 40–60. *J Epidemiol Community Health* 1993;47:355–7.
- 2 Latta C, Wilkinson RW, Gilmore OJA. Diverticular disease and varicose veins. *Lancet* 1973;i:1089–90.
- 3 Widmer LK ed. *Peripheral venous disorders—prevalence and socio-medical importance*. Bern: Hans Huber, 1978:1–90.
- 4 Evans CJ, Fowkes FGR, Leng GC *et al*. Role of duplex scanning in epidemiological studies of venous disease. *J Epidemiol Community Health* 1993;47(5):A418.

Reply

We thank Drs Evans and Fowkes for their valuable comments concerning the difficulties encountered in validating the diagnosis of varicose veins.

We agree that self reporting of any chronic condition—including varicose veins—may be biased when compared with any other method of determining a disease or an impairment. Self reporting of varicose veins in our study resulted in a reproducibility (Chamberlain index)¹ of 79% for positive diagnosis and 89% for negative diagnosis when judged against an examination by a surgeon using standard tests and continuous wave Doppler ultrasound in the evaluation of superficial veins.

The photographic re-evaluation in the Basle study resulted in a reproducibility of 87%–94% for negative diagnosis and 72%–95% for positive diagnosis of varicose veins or chronic venous insufficiency.² We also have demonstrated that grading of varicose veins is difficult when photographs are used in the re-evaluation. Even between two surgeons the classification was similar in only 74% of the cases.³

Our epidemiological study aimed at finding visible varicose veins in a fairly large population sample. From the surgical point of view diagnosing visible varicose veins was not a major problem either to a patient or to the surgeon controlling the self-reporting. The reproducibility indexes in our study were 79% and 89%. If two independent observers had examined the legs the reproducibility indexes would probably have been higher and not lower than that. If the patient has a correct diagnosis and he or she knows it, why should we ignore it?

Duplex sonography is an acceptable standard for measuring the severity of reflux in venous insufficiency. However, in normal legs it may possess some degree of inter-observer variability. Duplex sonographic evaluation of normal superficial valves can also be equivocal and dependent on the reverse flow velocities.⁴ Superficial incompetence has been shown even in 37% of

Measuring varicose veins in population surveys

SIR—In a survey of the prevalence of varicose veins in the general population in Finland, Laurikka *et al* measured prevalence using a self completed postal questionnaire.¹ The authors validated this method of measurement by comparing the answers of a randomly selected group of 166 respondents with the clinical evaluation of one surgeon. The opinion of one surgeon is not an acceptable “gold standard” to use in this situation because of observer variability in defining varicosities. One approach to reducing observer bias is to use classification of varicose veins by two or more observers.² In a major epidemiological study in Basle, classification was based on three coloured photographic slides which were analysed according to specific criteria.³

This latter method will also be used in the forthcoming Edinburgh Vein Study, in which the prevalence of early venous disease and associated risk factors will be measured in a random sample of the Edinburgh population. In addition to visual assessment of varicose veins, incompetence of venous