held as being a form of test; e.g. latex agglutination, dipstix, for one particular pathogen, performed at the patient's bedside.<sup>3</sup> Here, Dr Sanders is commenting on the proximity of a conventional laboratory set-up near his consulting room.

In summary, these patients are probably suffering from viral sore throats and, although group D streptococci have been isolated in 12% of these cases, we would not agree that this organism is responsible for infection here. In our opinion, there is therefore no reason to challenge current thinking on the pathogenicity of \$\beta\$-haemolytic streptococci.

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## References

- Sanders S. Streptococcal infection observed in the Autumn of 1995. Br J Gen Pract 1998; 48: 989-990.
- Hausler WJ, Sussman M (eds). Topley and Wilson's Microbiology and microbial infections. 9th edition. London: Arnold, 1998.
- Hobbs R. Near patient testing in primary care. BMJ 1996; 312: 263-264.

## Screening: the inadequacy of population registers

Sir

Concern had been expressed at the low cervical screening rate in one practice in our district: only 46 percent of women aged 20 to 64 years had a record of a cervical smear in five years, which was depressing the all-district rate (85%). University students comprise the majority of patients registered.

It was decided to scrutinize the data on which the low uptake rate was based. With the cooperation of the practice concerned, a 10% sample was drawn from the health authority patient registration database of women in the practice who met the following criteria:

- Were registered with the medical practice concerned,
- Were in the age band eligible for screening (20 to 64 years),
- Were registered with the practice for at least one year, and
- Never had a smear or who had not had a smear in the previous five years (according to health authority records).

One hundred and thirty-nine women

were identified (falling to 135 once duplicate records had been eliminated). All were sent an anonymous questionnaire by recorded delivery with a reminder one month later. The post office returned 100 envelopes as 'gone away'. Thirty-five completed questionnaires were returned (a true response rate of 100 %). The 'gone away' rate in the survey was 74%. Twelve women (34% of responders) said that they had had a cervical smear (four gave no indication or were spoiled questionnaires). Given the high number of 'gone away's, the true take-up rate for cervical screening in this practice population is high.

As our study shows, it is important to challenge routine data that seem to identify a low uptake of screening for cervical cancer in primary care. Not only may the primary care team be unfairly punished (in managerial or remuneration terms), but women may be needlessly pressed to attend for screening when they have been conscientious all along.

Sending post by recorded delivery has been shown to be helpful in investigating ghost patients on this database. It requires the intended recipient to sign on delivery and secures the return of questionnaires where the addressee has moved on. Also, the Post Office is under an obligation to return all 'gone-away' mail — in this study, 'gone-away' mail was being returned up to six months after posting.

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## Screening for abdominal aortic aneurysms in general practice

Sir

A ruptured abdominal aortic aneurysm (AAA) is a life-threatening condition with an overall mortality rate of 80 to 94%. Following two deaths in our practice due to ruptured AAAs, we decided to selectively screen our practice population by abdominal ultrasound.

Certain risk factors increase the incidence of an AAA; e.g. smoking<sup>2</sup> and claudication,<sup>3</sup> and I therefore devised a simple scoring system to select people for screening. Two points were allocated for a history of smoking, peripheral vascular disease, and family history of AAA. One point was given for being male, diabetic, suffering from hypertension, or having raised lipids. Thus, a male smoker who suffers from diabetes and claudication

would score six points.

Our practice consists of five doctors with 6892 patients, of which 2558 are between the ages of 60 and 79 years, and of these 179 scored three points or more on a computer search for risk factors. These patients were invited to the surgery for an abdominal ultrasound, and 100 people attended. Three patients were found to have an aortic aneurysm greater than 4 cm and were referred to vascular surgeons; one has now had their aneurysm successfully repaired and two are being reviewed by the surgeon. Two other patients were found to be just below the limits for referral, and they will be re-scanned at a later date.

The study was small and the practice computer database was incomplete (in the screened population, a smoking history was only present in 44%), however, it was well received by the patients and may well have prevented a ruptured AAA in one or more patients. If only patients scoring five or more risk points were screened, then two patients (including the person operated on) out of 23 (9%) would have been found, and one of the recent practice deaths due to AAA could have been prevented. In a large study that screened people in the basis of age (65 to 80 years), approximately 1.5% were found to have an AAA greater than 4 cm in size.4

If, in larger studies, other practices found that by targeting an 'at risk' population, one produced a higher positive screening rate, then one could suggest that selective screening would be feasible by keeping down costs yet discovering a significant number of AAAs before they rupture.

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## References

- Johansson G, Swedenborg J. Ruptured abdominal aortic aneurysms: a study of incidence and mortality. Br J Surg 1986; 73: 101-103.
- Lederle FA, Johnson GR, Wilson SE, et al. Prevalence and associations of abdominal aortic aneurysm detected though screening. Veterans Affairs Cooperative Study Group. Ann Intern Med 1997; 126: 441-449.
- Simon G, Nordgren D, Connelly S, Shultz PJ. Screening for abdominal aortic aneurysm in a hypertensive patient population. Arch Intern Med 1996; 156: 2081-1084
- Scott RAP, Wilson NM, Ashton HA, Kay DN. Influence of screening on the incidence of ruptured abdominal aortic aneurysm: five year results of a randomized controlled study. Br J Surg 1995; 82: 1066-1070.