

Potential endocervical pathogens before termination

EDITOR, — Mike Cohn and Peter Stewart report the prevalence of potential pathogens in the cervical canal before termination of pregnancy.¹ An association between one of these pathogens (*Chlamydia trachomatis*) and increased morbidity after termination of pregnancy has also been reported.^{2,3} We recently conducted an audit of the effect of screening for *C trachomatis* (MicroTrak, Syva) and treatment in women seeking termination of pregnancy at Taunton and Somerset Hospitals. We studied all women offered termination between January 1990 and June 1991. They were divided into two groups. Those in group 1 (n=140) had a termination between January 1990 and May 1990, when no screening was done, and those in group 2 (n=306) had a termination between June 1990 and June 1991, when screening was routinely performed before termination. Those in whom *C trachomatis* was detected were treated post-operatively with doxycycline 100 mg twice daily for 10 days, and instructions for treatment of their sexual partners were given to their general practitioners.

C trachomatis was identified in 49 (16.0%) women in group 2. Forty two of these women were single nulliparous women aged 15-24. This represents 45.2% of terminations in this age group. In group 1, 17 (12.1%) patients were readmitted with abdominal pain, vaginal discharge, and fever. *C trachomatis* was detected in 11 of these patients. Two (0.5%) patients in group 2 were readmitted with fever, lower abdominal pain, and vaginal discharge. *C trachomatis* was not detected in either, and both responded to clavulanic acid and amoxicillin. The complication rate in group 1 was significantly higher ($p < 0.05$) than that in group 2.

Our findings support those of Cohn and Stewart that *C trachomatis* is more commonly isolated in single young nulliparous women. The fact that *C trachomatis* was isolated in only a proportion of our complicated cases also suggests that other pathogens such as *Neisseria gonorrhoeae*, *Mycoplasma hominis*, and *Ureaplasma urealyticum* may be responsible for postoperative infections. We support the suggestion that all women routinely undergoing termination of pregnancy should be screened for potential pathogens. If this is not possible, however, we agree with Cohn and Stewart's suggestion that selective screening of young nulliparous women should be offered.

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- Cohn M, Stewart P. Prevalence of potential pathogens in the cervical canal before termination. *BMJ* 1992;304:1479. (6 June.)
- Southgate L, Trehan J, Williams R. Detection, treatment, and follow up of women with Chlamydia trachomatis infections seeking abortion in inner city general practice. *BMJ* 1989;299:1136-7.
- Barbacci MB, Spence MR, Kappus EW, Barkman RC, Rao L, Quinn T. Post abortal endometritis and isolation of Chlamydia trachomatis. *Obstet Gynecol* 1986;68:686-90.
- Qvigstad E, Skaug K, Jerve F, Vik IS, Ulstrup JC. Therapeutic abortion and Chlamydia trachomatis infection. *Br J Vener Dis* 1982;58:182-3.

EDITOR, — Mike Cohn and Peter Stewart's observations on the prevalence of potential pathogens in the cervical canal before termination of pregnancy are interesting but, I believe, do not support their conclusions.¹ They (arbitrarily) defined women with *Chlamydia trachomatis* or *Neisseria gonorrhoeae* infection as being at high risk of pelvic infection after termination without considering the size of the risk. *C trachomatis* was isolated from 155 of the 1784 women screened and *N gonorrhoeae* from three; we are not told if any women had both infections, but in any case this is a rate well below 10%. The authors go on to recommend "that all patients requesting termination of pregnancy are screened for potential endocervical pathogens" but fail to produce any evidence for a beneficial effect of such a screening policy.

I have produced a model that may be adjusted to any of several variables to predict the effectiveness of screening for *C trachomatis* before termination of pregnancy.² It must be borne in mind that not all women who are positive for *C trachomatis* develop pelvic infection, nor are those who are negative on testing immune to such infection. In fact, depending on the relative numbers who are positive and negative on screening, more women who are negative than are positive for *C trachomatis* may develop pelvic infection.

Using the model and assuming that 10% of women screened will have a positive result and that 15% of these women will develop pelvic infection, compared with 5% of those with a negative result, then if the screening test was entirely reliable and effective treatment was given 4.5% of women could be expected to develop pelvic infection compared with an expected 6% if screening had not taken place. The values used in this example are entirely consistent with various published papers. Estimates derived from this model hardly provide convincing evidence of the merits of such screening and show that an appreciable number of women destined to develop pelvic infection after termination of pregnancy would be falsely reassured by screening.

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- Cohn M, Stewart P. Prevalence of potential pathogens in cervical canal before termination of pregnancy. *BMJ* 1992;304:1479. (6 June.)
- Griffiths M. Predictions of the effectiveness of a policy of screening for Chlamydia trachomatis in women requesting termination of pregnancy. *Br J Family Planning* 1991;17:44-5.

EDITOR, — We believe that Mike Cohn and Peter Stewart's short report recommending that all patients requesting termination of pregnancy should be screened for endocervical pathogens has a major omission.¹ Anaerobic bacteria, which are isolated in large numbers from the vaginal secretions of women with anaerobic (bacterial) vaginosis, have long been associated with pelvic inflammatory disease, and surgical termination of pregnancy could lead to spread of these organisms to the upper genital tract. In addition, Larsson *et al* have shown that anaerobic vaginosis and chlamydia are independent risk factors for pelvic inflammatory disease after abortion and that treatment of anaerobic vaginosis leads to a reduction in complications after abortion.^{2,3}

It therefore seems appropriate to screen patients

attending for termination of pregnancy for both endocervical and vaginal infections, particularly anaerobic vaginosis.

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- Cohn M, Stewart P. Prevalence of potential pathogens in cervical canal before termination of pregnancy. *BMJ* 1992;304:1479. (6 June.)
- Larsson PG, Bergman B, Forsum U, Platz-Christensen J-J, Pahlson C. Mobiluncus and clue cells as predictors of PID after first trimester abortion. *Acta Obstet Gynecol Scand* 1989;68:217-20.
- Larsson PG, Platz-Christensen J-J, Thejls H, Forsum U, Pahlson C. Incidence of PID following first-trimester legal abortion in women with bacterial vaginosis after treatment with metronidazole: a double blind randomised study. *Am J Obstet Gynecol* 1992;166:100-2.

Cervical smear testing for immunosuppressed women

EDITOR, — Since the publication of our letter on the progression of borderline abnormalities on cervical smear testing¹ my attention has been drawn to the fact that in 1989 Grampian Health Board published guidelines on screening for cervical cancer which included advice for women who are immunosuppressed. The guidelines suggest that these women should have smears taken annually.

The guidelines are sent to every general practitioner's surgery. Unfortunately, as our retrospective review indicated, this advice needs to be reinforced to general practitioners and also to haematologists and oncologists, who seem to be equally unaware of it. Improving patients' awareness of their potential risk of cervical cancer would also ensure annual attendance.

There is an excellent cervical screening service in Grampian region, but the principle that immunosuppressed women should have annual smear testing is clearly not being practised.

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- Ratcliffe MA, Dawson AA, Flannelly G. Progression of borderline abnormalities on cervical smear testing. *BMJ* 1992;304:1691. (27 June.)

Heterosexual spread of HIV infection

EDITOR, — In her editorial on heterosexual spread of HIV in the United Kingdom Anne M Johnson uses infection with penicillinase producing *Neisseria gonorrhoeae* as an example of a sexually transmitted disease that has been imported into the United Kingdom and subsequently "thrived locally."¹ Our experience in a busy genitourinary medicine clinic is at odds with this statement. Although in 1982 it seemed that penicillinase producing *Neisseria gonorrhoeae* was becoming