

GONORRHEA IN OREGON: A RISK OF INTIMACY

SEXUALLY transmitted diseases (STDs) are the most frequently reported group of communicable diseases in Oregon. This *CD Summary* focuses on one of these diseases, gonorrhea, and reports changes in the epidemiology of a disease that until recently, appeared to be on a relentless, if boring, march to eradication.

OREGON TRENDS

Following high case counts in the liberated 1960s and 1970s, the number of gonorrhea cases in Oregon steadily decreased from 11,162 in 1980 to 773 in 1997. Since then, the case count has leveled off and even begun creeping up (figure, below). We are on a pace to see 900 cases this year. Rates are notably up among two groups traditionally "at risk": men who have sex with men (MSM), and black women under 30. The reported incidence rate among MSM is nearly three times higher than it was a year ago. So far in 1999, 13% of cases are among MSM. Forty-five percent of these cases are 30 to 39 year olds. Black women under 30 already have gonorrhea incidence rates 13 times that of young white women (3,146 vs 246 per 100,000).

EXPLANATIONS FOR THE CHANGE

There are any number of reasons why case counts could have leveled off: better disease surveillance of recognized "at risk" groups, improved screening, disease "imports" from high incidence areas, the development of resistant or-

ganisms, and changes in patterns of sexual partnering and condom use. Do the Oregon data afford us any insight in what is really happening?

Although some cases may be due to both better case finding among high risk populations and improved sensitivity of the latest gene probe tests, the total number of diagnostic tests has not increased enough to explain higher case counts. We can't blame someone else either, since "imported" gonorrhea is only a small proportion of the cases.

Neither is antimicrobial resistance a factor in Oregon, since all recent isolates have been sensitive to the first-line medications. The CDC's Gonococcal Isolate Surveillance Project tests over 5000 isolates per year from 26 United States cities (including Portland) and includes approximately 1.3% of all reported gonorrhea infections among men in the United States.¹ Strains with intermediate resistance to quinolones have been isolated sporadically from Portland specimens from 1990 through 1998, and one resistant organism was identified in 1997. Generally, intermediate resistant strains will respond to recommended doses of ciprofloxacin. Quinolone resistant *Neisseria gonorrhoeae* has not been a problem in the US, where fewer than 1% of isolates demonstrate decreased susceptibility to ciprofloxacin.² However, high-level resistance is frequently seen in Asia, so there is a good chance of case importations to Oregon from the Pacific Rim. Although the average minimum inhibitory concentration to cefixime and ceftriaxone is higher in 1998 than it was in 1988, all isolates remain susceptible. Spectinomycin, the main drug for treating highly resistant organisms, continues to be effective.

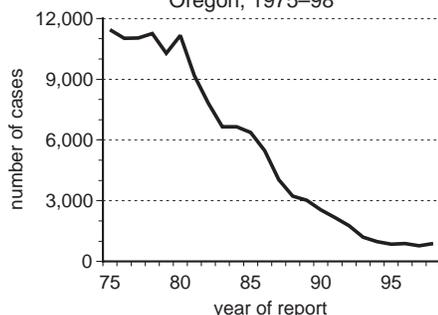
Are changes in sexual behaviors responsible for changes in the epidemiology of gonorrhea? The answer in Oregon is probably yes, but we are currently

seeking the specifics in a collaborative study with the Multnomah County STD Program and don't yet know for sure. Nationally, we do know that the number of cases among heterosexuals decreased at the same time the number of cases among MSM increased and that we are not alone. A CDC survey of 26 STD clinics across the country found that the proportion of gonorrhea patients who are MSM increased 74% between 1993 and 1996.³ Likewise, about 50% of persons with newly acquired gonorrhea have had gonorrhea at least once already and so comprise an easily identified core group of persons with recurring high-risk sexual behaviors.

INTERVENTIONS

Because half of the men and four-fifths of the women are treated at private clinics, reducing gonorrheal infections will require intervention and referral by private providers. Clinicians caring for black women, gay men and sexually active youth should not shrink from taking a direct and explicit STD risk history, and should have a low threshold for laboratory testing. Gene probes have improved the sensitivity of laboratory tests of urine or cervical secretions for gonorrhea and *do not require* a urethral specimen from men. Cultures are still useful for antimicrobial resistance testing in clinical relapses, and for testing oral and rectal specimens, but they are more expensive and may not be quite as sensitive for detecting infection at some anatomic sites. Rapid (results in less than 30 minutes), inexpensive (<\$1 per test), chemically stable, and convenient tests for gonorrhea are under development.⁴ But don't wait. Collect specimens for diagnostic testing from anyone who might have gonorrhea and prescribe appropriate treatment. Treat all documented and suspected gonococcal infections with recommended therapies. These regimens result in 97% to

Reported Incidence of Gonorrhea
Oregon, 1975-98



99% cure rates and patients need not return for a test of cure after treatment (see box).

As long as quinolone resistant strains comprise less than 1% of all gonorrheal isolates, the fluoroquinolone regimens can be used with confidence. Patients who remain symptomatic after therapy should have a gonorrheal culture, not just a repeat probe test, and any gonococci isolated should be tested for antimicrobial susceptibility. While persistent urethritis, cervicitis, or proctitis also may be due to resistant *N. gonorrhoeae*, *Chlamydia trachomatis* or other organisms, these infections are usually due to reinfection rather than treatment failure, and are a fairly compelling indicator of

TREATMENT OF GONORRHEA

In general, it is considered prudent to presume that patients with gonorrhea are co-infected with *Chlamydia trachomatis* and treat accordingly.* Thus, for uncomplicated gonococcal infections of the cervix, urethra, or rectum, we recommend:

cefixime (400 mg orally in 1 dose), or ceftriaxone (125 mg IM in 1 dose), or ofloxacin (400 mg orally in 1 dose), or ciprofloxacin (500 mg orally in 1 dose)

and

azithromycin (1 g orally in 1 dose), or doxycycline (100 mg orally b.i.d. x 7 d)

* At least 20-40% of such patients are co-infected, and *Chlamydia* screening can be slow and somewhat insensitive. The bird in hand is worth two in the bush, as it were. Because chlamydial infections are so much more common, however, the converse (if *Chlamydia*, then GC) is not a good working hypothesis.

the need to improve patient education and referral of sex partners.

Speaking of referral, the identification and treatment of infected sex partners is a critical STD prevention strategy. All sexual partners of a person with gonorrhea should be tested if their last sexual contact with the patient was within 60 days of diagnosis. Health department staff are available to counsel clients identified with chlamydial, gonorrheal, or early syphilitic infections and will assist in partner referral activities. Partners who are infected must be treated, even if they are asymptomatic, and instructed to avoid sexual intercourse until therapy is completed and they and their sex partners no longer have symptoms. And, as always, urge your patients to use safe sexual practices—perhaps curling up with a good book instead.

REFERENCES

1. Fox KK. Surveillance for antimicrobial resistance: Lessons from the gonococcal isolate surveillance project (GISP). Thirteenth Meeting of the International Society for Sexually Transmitted Diseases Research, July 11-14, 1999, Denver, Colorado.
2. Knapp JS, Fox KK, Trees DL, Whittington WL. Fluoroquinolone resistance in *Neisseria gonorrhoeae*. Emerg Infect Dis 1997;3:33-39.
3. CDC. Gonorrhea among men who have sex with men—selected sexually transmitted diseases clinics, 1993-1996. MMWR 1997;46:889-892 (Sept. 26).
4. Schachter J. Progress in STD diagnostics. 12th World AIDS Conference, Geneva, Switzerland, 1998.

HIV Training Opportunity

IN CONJUNCTION with the Northwest AIDS Education Center in Seattle, the Multnomah County HIV Clinic is now offering all-day training sessions for interested providers (physicians and mid-levels). Clinicians will work one-on-one with an experienced HIV provider in a

combination of clinical and didactic sessions, focusing on current trends and new treatment options. Currently, sessions are being offered on Fridays. There is no charge. For more information, contact Brian Taylor, RN (503/248-5020 or brian.l.taylor@co.multnomah.or.us) or Dr. Mark Loveless (503/731-4029, mark.o.loveless@state.or.us).

Latex Survey of Health Care Facilities to Begin

THE USE OF LATEX gloves and other latex products in health care settings continues to be a public health issue. (For more on this, refer to the *CD Summary* of September 15, 1998, Vol. 47, No. 19.) The creation of "latex safe" environments in hospitals and other health care facilities can minimize or prevent potentially life threatening latex allergies in workers and patients. OHD is collaborating with the Association for Professionals in Infection Control and Epidemiology, Inc. of Oregon and Southern Washington (APIC-OSW) to conduct a survey, via e-mail, of current latex policies and practices in the 44 hospitals in the association. Other health care facilities without APIC-OSW members that wish to participate can get the survey questionnaire from the Health Division website: www.ohd.hr.state.or.us/cdpe/eoi/welcome.htm.

Send responses to Teresa McGivern before September 30, 1999 by e-mail (teresa.e.mcgivern@state.or.us), fax (503/731-4798), or snail mail (800 NE Oregon Street, Suite 772, Portland, Oregon, 97232). For more information, call her at 503/731-4024.