

CHAPTER 30

Sexually Transmitted Diseases

Sexually transmitted diseases (STDs) can kill, cause lifelong pain, leave both men and women infertile. They can kill, blind or deform babies before or after birth. Worldwide, some 250 million people contract an STD each year.

Syphilis causes some 2-3 percent of these cases. When Columbus and his men brought it back to Europe in the fifteenth century, it was the AIDS epidemic of its time. It starts with a hard lump or painless ulcer on or near the genitals or on the throat, tongue or lips anywhere from ten to ninety days after sex. However, most women and some men don't get this - which means it can easily be innocently passed on. There is a 30-60 percent chance of catching it on just one exposure.

The lump or ulcer disappears after 4-6 weeks. Soon after, fresh skin lesions and mucous patches appear. Lymph glands swell and the victim probably has headache, fever, sore joints, sore throat, runny nose and eyes. There may be meningitis or damage to eyes, bones, muscles, several internal organs. This may last anywhere from a few weeks to a year or more. Then, if you didn't know better, you'd think you were over it. However, years later, it attacks the brain (causing paralysis and madness), heart, bones, muscles, internal organs. It is diagnosed with blood tests and treated with penicillin.

Gonorrhoea is much more prevalent, causing around a third of all STDs - some two million cases a year in the US. In the typical case, a vaginal or penile discharge develops between a day and three weeks after the event and you feel like you're pissing razor blades. About thirty percent of women and five percent of men are unlucky enough not to experience this - unlucky because the infection can spread to all parts of the genital tract, to the bladder and other abdominal organs, and to joints, brain, heart or skin. It's also unlucky for anyone they sleep with at this time; 20-25 percent of men and up to ninety percent of women will be infected after just one exposure. Gonorrhoea is diagnosed by smear and culture of the discharge and is treated by an injection of ceftriaxone. It can also cause a throat infection in women performing oral sex on an infected male, as well as eye infections.

So-called non-gonococcal urethritis contributes nearly forty percent of all STD. Most of this is due to *Chlamydia* - some three to four million cases per year in the US. Symptoms are similar to the initial symptoms of gonorrhoea but take longer to develop (a week to several months) and are often extremely mild. In fact, seventy percent of women and thirty percent of men infected are asymptomatic. As with gonorrhoea, this doesn't mean you're safe. You can still end up sterile or infertile. Females can get pelvic inflammatory disease (odds increased if you use an IUD, douch or have had a miscarriage, abortion, childbirth or cervical surgery) and can experience miscarriage, ectopic pregnancy or premature delivery. Since five percent of young non-drug injecting Australian heterosexuals carry *Chlamydia* and the infectivity rate is at least thirty percent, your chances of getting it from a new partner are at least 1.5%. The diagnosis of *Chlamydia* infection has been vastly improved by the development of molecular methods for detecting it in urine. It is treated with doxycycline, or erythromycin if the woman is pregnant.

By far the most common STD is trichomoniasis, which accounts for nearly half the total - though cases are declining rapidly in countries (like Australia) where metronidazole (Flagyl) is routinely used for treating the mild, non-sexually acquired vaginal infection due to *Gardnerella*. In females, *Trichomonas* (a little parasite) causes a foul-smelling vaginal discharge, pain on urination and pain on intercourse. Without treatment, it may persist for years. In males, infection is usually asymptomatic (which is one reason it is so prevalent) but it can cause a urethral discharge, pain on urination, prostatitis and infertility.

Genital herpes constitutes 4-5 percent of STDs but the incidence of symptomless carriage is much higher. It is probable that at least one in six Australians is infected and rates are probably similar in other countries. The first attack comes on 1-26 days after exposure, with itching and

tingling in the genital area and pain in the testicles. Blisters appear, quickly burst and become painful sores. They usually clear up within two weeks but often recur. Herpes increases the risk of miscarriage and premature birth. If the baby is infected from sores on the vagina or labia during birth, it may suffer brain damage, blindness or death. Herpes is also associated with cancer. It is diagnosed by culture of the virus. As with most viral illnesses, treatment is difficult but acyclovir can at least reduce its severity and lessen the frequency of recurrent attacks.

Certain strains of the virus that causes genital warts also cause cancer. Cervical cancer kills 350 Australian women a year. Many of these cases are associated with infection by these strains, often hidden in the vagina. Probably a third of all Australians carry the virus. Diagnosis is easy when warts with typical appearance are present. The presence of the virus where warts are not visible can be established by microscopy and molecular methods. Warts can be removed by burning with various caustic materials or electrosurgically or with a laser, or by freezing with liquid nitrogen. Injecting interferon into the base of the wart can also sometimes be successful.

Chancroid is a less common STD but there are still some two million cases a year worldwide and there has been a dramatic increase in cases in the US from about 1,000 cases a year in the 1970s up to about 10,000 cases a year now. One to ten days after exposure, one or more painful pustules appear on the genitals. These may rupture to form ulcers. Chancroid is diagnosed clinically and by smear and culture of material from ulcers. It is treated with an injection of ceftriaxone.

Chlamydial lymphogranuloma, caused by a different strain of *Chlamydia* to that causing non-gonococcal urethritis, constitutes less than one percent of STD. It occurs mainly in tropical areas, including Australia. A small papule comes and goes somewhere on the genitals some three to twelve weeks after that naughty. A week or so later, big lumps come up, which slowly break down into abscesses. The lymph glands become swollen. Without treatment, it becomes chronic and restricting fibrous strands can develop within the genitals or anus or rectum.

Granuloma inguinale, or Donovanosis, is another tropical STD found in Australia. Spreading, ulcerating, granulomatous lesions appear on the genitals or adjacent areas anywhere from eight to eighty days after intercourse. Without treatment, the condition becomes chronic.

The STD that has grabbed most of the headlines in recent years is AIDS, caused by human immunodeficiency virus (HIV). With over twenty million currently infected worldwide and a million new cases a year, this is hardly surprising. However, while the disease is reportedly reducing the mortality rate in Africa to only thirty years, Americans have become increasingly blasé. Whereas, in a 1987 Gallup poll, 68 percent of Americans cited AIDS as 'the most urgent health problem' facing the country, in 1999 this number had fallen to 34 percent.

It is estimated that 20-30 percent of those infected with HIV will be symptomatic within five years. Symptoms include a persistent dry cough, swollen lymph glands, skin lesions, fatigue, fever, night sweats, loss of appetite, weight loss, thrush, chronic diarrhoea, increased susceptibility to infection and difficulty in breathing.

Despite drug advancements lengthening the life of its victims, AIDS is still nearly always fatal. Death is usually caused by one or other of the many infections to which sufferers are prone but may be caused by the attack of the virus itself on the brain. Even if not fatal, this attack often causes partial paralysis, loss of coordination and mental disorders.

Having other STDs increases the chance of contracting AIDS. Syphilis, chancroid, herpes, *Chlamydia* and *Trichomonas* increase the risk by between two and nine times. This may well have a lot to do with the high prevalence of AIDS in some populations, such as parts of Africa.

Because of the loss of immune reaction in AIDS, the usual diagnostic tests for other STDs (especially syphilis) may be negative and the patient may respond poorly to treatment and may be infectious for much longer than usual.

As well as these diseases transmitted mainly, or exclusively, sexually, there are a couple of dozen organisms - bacteria, fungi, parasites and viruses - which can be acquired during sex and

will cause disease. An outstanding example is hepatitis B, which kills 1,200 Australians a year; up to half of these infections are sexually acquired. Some cases of hepatitis C are also sexually transmitted. Other examples are shigellosis, giardiasis and amoebiasis in homosexual men, and *Candida*, pubic lice infection, scabies and molluscum contagiosum in both sexes.

Yeast infections (thrush) can also be transmitted sexually but are usually not - except from female to male. Most genital yeast infections are of the vulva and vagina and caused by *Candida*. Occasionally, this can be passed to the male and cause a skin infection on the penis or in the groin. Most women have very low numbers of this organism in their vaginas but its numbers are kept at this level by the action of the predominant bacterium at the site, *Lactobacillus*. Infections usually occur when the numbers of *Lactobacillus* are decreased by antibiotics or topically applied brews a woman uses to freshen her fanny. Female hormones, whether taken as such in The Pill or produced by the body in pregnancy and menstruation, also favour the yeast over the bacteria. Corticosteroids knock out the part of the immune system that normally deals with yeast and promotes infection. And diabetes, by providing sugar at the site for the yeast to feed on, makes for persistent infection. Thrush can usually be treated by using creams or pessaries containing drugs which specifically kill yeasts. These can be purchased over the counter at a pharmacy but the condition should first be diagnosed by a doctor and laboratory examination of specimens to rule out other agents which can cause very similar symptoms (itching and discharge, sometimes burning on urination). In diabetes, the prime thing is to bring the diabetes under control.

Urinary tract infections in women, while not sexually transmitted in the sense of being passed from one partner to another, are related to sex in such a high percentage of cases (at least in sexually active women) that they could almost be considered as such. This is because of the proximity of the rectum, with its load of bacteria, and the perineum, which also has a heavy population of bacteria, to the urethra, plus the presence of adequate moisture in the area during sex; plus the actions of hands, tongue, lips and penis in moving these bacteria from their resident area, where they do no harm, to the urethra and thence the bladder, where they can cause infection. This problem can be greatly helped by good hygiene but douching merely makes infection more likely. So do diaphragms. Women prone to this problem can often avoid it by urinating as soon as possible after intercourse, by drinking plenty of water and by drinking cranberry juice, which helps to keep bacteria at bay by acidifying the urine and may also have some natural antibiotic effect. Your doctor can also prescribe you an antibiotic to take immediately prior to, or just after, sex; this will often be enough to abort the infection. The symptoms of urinary tract infection include painful urination, burning or stinging on urination, increased frequency and urgency of urination, painful urination, often low back pain, sometimes fever. All these symptoms can also be caused by genital infections of various kinds and you should see your doctor to have a specimen of urine (and other specimens if necessary) cultured in the laboratory and an appropriate antibiotic prescribed.

How can you stop yourself getting an STD other than by giving up sex? The best practicable solution is a faithful relationship with someone who is also faithful. In any case, be selective about your partners. Almost a quarter of STDs are contracted from 'pick-ups', many of them met drinking at a pub. However, almost half are acquired from partners known to the person for two months or more.

If either you or your partner isn't faithful, you should use a condom or diaphragm with a spermicide containing nonoxydol-9, which has been shown to kill most organisms causing STDs, including HIV.

If you should show signs of infection (or even in the absence of symptoms if you're at all unsure of your partner), you should contact your doctor and have the necessary tests performed. Most STDs (the viral ones tend to be exceptions) are fairly easily cured but can be devastating if untreated.