# Patient Ignorance One Root of Herpes Prevalence

#### BY TIMOTHY F. KIRN Sacramento Bureau

NAPLES, FLA. — Patients with genital herpes often believe they can't transmit the infection while they are asymptomatic, and the majority of transmissions are probably borne of this ignorance, Stephen K. Tyring, M.D., said at the annual meeting of the Florida Society of Dermatology and Dermatologic Surgery.

Many patients may be incredulous when you tell them this, because they have been told they must have a lesion or symptoms to transmit the virus.

With such patients, you can point out that 80% of the population is herpes simplex virus type-1 seropositive, but almost nobody ever kisses someone when they have a fever blister on their mouth, said Dr. Tyring, a dermatologist and infectious disease specialist who is medical director of the Center for Clinical Studies at the University of Texas Health Sciences Center, Houston.

The prevalence of herpes simplex type-2 (HSV-2) increased by

30% during the last 2 decades, Dr. Tyring noted.

It is now estimated that 45 million people in the United States, or 15% of the population, are seropositive for HSV-2.

It is estimated that 80% of transmissions occur when the carrier is asymptomatic, Dr. Tyring said.

Women are at greater risk of acquiring the virus, he said. The overall rate of transmission from an infected partner to an uninfected partner is about 10% per year.

The annual rate rises if the infected partner is the male; the female partner has a 20% chance of becoming infected, and a 30% chance if she is seronegative for HSV-1. If the female is the infected partner, the male has a less than 10% chance of infection.

Condoms protect against transmission but are not foolproof, and they probably benefit



Condoms can help prevent transmission of herpes simplex virus, but areas not completely covered by the condom remain susceptible to infection.

women more than men.

When men develop herpes lesions or have viral shedding, they tend to do so on the distal genitalia, which the condom covers. Women, however, shed virus into secretions that can get on the base of the penis or even the scrotum.

In a seminal study published last year, in which almost 1,500 infected individuals with seronegative partners were randomly assigned to 500 mg of valacyclovir or placebo once daily, Dr. Tyring and colleagues reported that the rate of transmission was reduced by 50% over an 8-month period (N. Engl. J. Med. 2004;350:11-20).

"The study used valacyclovir, but you can substitute famciclovir or acyclovir and probably get the same result," Dr. Tyring said.

"The bad news is, we don't

have a cure," he said. "This is just one more tool in the armamentarium."

The new genital herpes vaccine has been shown to be highly effective, but, unexpectedly, only in women.

A major new trial is underway to better understand why this might be, and, specifically, the mucosal immunity women appear to develop.

Genital herpes increases the risk of HIV transmission two- to fivefold, Dr. Tyring said. This increased risk occurs because there is a reduced epithelial barrier in a person with herpes, but also because the individual with herpes has infiltrates of CD-4–positive cells where the lesions occur.

Studies have shown that one can use acyclovir, valacyclovir, or famciclovir to keep herpes in check in the HIV-infected individual—which not only addresses the herpes but sometimes improves the response to HIV therapy as well, Dr. Tyring said.

For HIV patients with resistant herpes, the Centers for Disease Control and Prevention recommends using a topical formulation of cidofovir.

## Combine Topical, Systemic Therapies to Knock Out Tough Case of Crusted Scabies

### BY SHERRY BOSCHERT San Francisco Bureau

KOHALA COAST, HAWAII — Attack hyperkeratotic scabies both topically and systemically or your treatment will fail, Timothy G. Berger, M.D., said at a conference sponsored by the Center for Bio-Medical Communications Inc.

He divides patients with scabies into two categories to guide management those with a low burden or a high burden

of disease. For the typical patient with a low burden, two applications of permethrin 5% cream a week apart will cure 95% of cases.

But a double whammy usually is needed for patients with

a high burden of disease—those with crusted or hyperkeratotic scabies, AIDS and scabies, or scabies acquired while in a long-term care facility or prison, said Dr. Berger of the University of California, San Francisco.

He prefers to use these two categories because patients with a high burden of disease may present with multiple papules instead of crusts, but need the combination therapy used for crusted scabies.

The combination treatment consists of weekly applications of permethrin 5% cream for 3-6 weeks plus ivermectin 200 mcg/kg every 2 weeks for two (or occasionally three) doses. The patient should show improvement by 3 weeks and continue to gradually improve.

Don't try to save a buck by skimping on the ivermectin, Dr. Berger warned. Don't round down the dose but, rather, give the full dose of ivermectin (usually 12-18 mg), and allow plenty of time to treat. In appropriate doses, the combination therapy has never failed him.

In a typical case, a family brought in an 87-year-old woman who had had 6

### Don't be dissuaded from suspecting scabies just because a patient has failed permethrin treatment or family members seem unaffected.

months of severe itching, though no one else in the family was itching.

The patient had failed treatment with multiple courses of permethrin, systemic steroids, and other medications.

She had a widespread papular eruption on her trunk, proximal extremities, and face, showing focal plaques, some of which were markedly hyperkeratotic, Dr. Berger said.

"The British describe this as looking like a fine white sand on the skin. That's exactly what it looks like," Dr. Berger said.

Her history was a tip-off: After a hip replacement 9 months earlier, she had spent time in a long-term care facility for rehabilitation. Scrapings of lesions on the soles of her feet were loaded with scabies mites and feces.

Don't be dissuaded from suspecting scabies just because a patient has failed permethrin treatment or family members seem unaffected, Dr. Berger advised.

Treat the whole family, but not necessarily immediately. Family members who are affected get immediate treatment,

but otherwise Dr. Berger waits to treat the family until the primary patient has been treated, so that the patient is no longer infectious.

High-burden cases often involve the scalp, so instruct patients to apply permethrin to the scalp too, he advised. Ivermectin won't help scabies involving the nail plate, so consider more aggressive treatments for nail scabies.

Ivermectin is secreted in sebum, he noted, which is one reason monotherapy may not work in the elderly, children, malnourished patients, or people with Down syndrome, all of whom make less sebum.

Immunosuppression plus neural disease puts patients at risk for crusted scabies, one reason that people with AIDS or Down syndrome are at higher risk for crusted scabies, he said.

Syphilis Outbreak In Idaho Tapers Off

A n outbreak of syphilis in southern Idaho that began in 2003 probably has peaked, according to Tom Shanahan, a spokesman for the Idaho Department of Health and Welfare.

Four babies with congenital syphilis were born in Idaho in 2003, and three were born in 2004. "We started seeing a rise in total cases of syphilis in 2002 and 2003; we are hopefully over the hump now," Mr. Shanahan said. In addition to the congenital cases, 45 cases of syphilis were reported in the state in 2003, and 78 cases were reported in 2004.

Although 21 cases of syphilis have been reported in 2005, no congenital cases have occurred so far this year.

"Drug use was a significant risk factor," Mr. Shanahan said. Approximately 70% of patients in Idaho's third district were methamphetamine or other drug users. Consequently, management strategies to control the outbreak include spreading the word about the association between drug use and syphilis, and educating the public through organizations that work with drug addicts.

The incidence of illness was highest in southwest Idaho, which reported 97 of the state's 144 cases of syphilis from 2003 to 2005.

The ages of the 97 patients ranged from 15-81 years, with an average age of 24 years; 14 of the 97 patients were 18 years or younger.