By Lee Bowman scripps HOWARD NEWS SERVICE

More than half of sexually active young women will be infected with human papilloma viruses if they continue to regularly have sexual relations over three years, according to a new study.

The results of the longest-running study of HPV and the benign and sometimes cancerous lesions the viruses can cause in young women were presented in the Journal of the American Medical Association.

Contrary to some previous research, the study showed that once a woman is infected with the virus, she is not certain to develop the minute, benign lesions in the

HPV afflicts sexually active women

cervix that can become cancerous. Only about 30 percent of the women who were infected developed the lesions over five years.

"We know little about the progression of HPV to cervical cancer. This study tells us something about the beginning of the story," said Dr. Barbara Moscicki, a professor of pediatrics at the University of California at San Francisco, whose team has been following the group of young women since adolescence.

About 30 of more than 100 known types of HPV can be passed from one person to another through sex-

ual contact. HPV is the most common sexually transmitted disease, infecting more than 5 million Americans each year, public health experts estimate.

HPV is thought to be the main cause of the low-grade lesions, or abnormal cells, in the cervix, some of which turn into tumors, but many of which simply go away on their own over a few months or years.

The American Cancer Society estimates there will be 12,900 new cases of invasive cervical cancer in the United States this year, and about 4,400 will die from the disease

this year.

The new study, as well as earlier work, shows that "HPV is necessary, but not sufficient by itself, to cause these lesions. Other behavioral and biological factors must be involved, most likely the persistence of viral infection and the woman's own immune reaction," Dr. Moscicki said.

While the risk of infection increased 10-fold with each new sex partner, the level of sexual activity or infection with other sexually transmitted diseases did not increase a woman's risk of develop-

ing abnormal cells.

"Our data show that some biological and behavioral risks thought to be associated with [lesions] are in fact risks for the acquisition of HPV," said Dr. Moscicki. The major identifiable cause for the lesions was HPV infection itself, with a further boost from cigarette smoking.

Since 1990, Dr. Moscicki's group has followed more than 800 teens and young women who were patients at family planning clinics. Among their earlier discoveries is the good news that even though there's no known medical cure for the infections, most (about 90 percent) of the young women appear to eventually clear the virus from their bodies within three years. However, many become reinfected.

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