

A Neglected Lesbian Health Concern: Cervical Neoplasia

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Many health care providers believe that lesbian women do not need routine Papanicolaou smears. This erroneous assumption fails to recognize that the majority of lesbian women have had prior heterosexual relationships and thus may be at risk for developing cervical neoplasia. The following case report describes a lesbian woman who denied prior heterosexual intercourse but who developed cervical intraepithelial neoplasia grade 2 (CIN 2) associated with a high oncogenic risk human papillomavirus (HPV) type. Sexual contact with multiple lesbian partners who had previous heterosexual relationships likely explains her cervical disease.

KEY WORDS. Homosexuality, female; primary health care; cervical neoplasia, intraepithelial; vaginal smears, sexually transmitted diseases; papillomavirus, human. (*J Fam Pract* 1996; 43:581-584)

A comprehensive and honest sexual history usually enhances the provision of health care for patients. This is particularly true when the clinician encounters a patient with a potential sexually associated medical condition. Similarly, knowledge of cancer risk-factor exposure and family history permits reasonable testing or preventive screening for the patient who is determined to be susceptible. A combination of sexual history, family history, and cancer risk-factor information guides cervical cancer screening practice. An absence of pertinent information through nondisclosure or a misinterpretation of divulged information may have a negative impact on patient health care. These two problems directly affect cervical cancer prevention efforts for lesbian women.¹

It is widely thought that lesbian women do not need Papanicolaou (Pap) smear testing.¹ This is because many clinicians are unaware that 80% of lesbian women have had heterosexual intercourse during their lifetime.² In addition, the remaining 20% of lesbian women who have never had heterosexual

intercourse may not be at as low a risk of developing cervical neoplasia as is often assumed, if human papillomavirus (HPV) DNA can be sexually transmitted between female partners. The following report illustrates a case of high-grade cervical intraepithelial neoplasia (CIN) associated with a high oncogenic risk HPV type in a lesbian woman who reportedly never had heterosexual intercourse.

■ CASE REPORT

An asymptomatic 30-year-old woman, gravida 0 para 0, presented for a routine physical examination and Pap smear. Her past medical history was unremarkable; she took no medication and there was no history of prior surgery. She had an 18-pack-year history of cigarette use and consumed a six-pack of beer per week. Her gynecologic history was unremarkable. She denied a history of sexually transmitted diseases and had never previously had a pelvic examination or Pap smear.

Her family history was significant; her mother and two sisters had "cervical lesions" removed by laser surgery.

The patient stated that she was "homosexual" and currently involved in a monogamous relationship for 3 years. She adamantly denied any previous heterosexual relationships or sexual contact, but had several female sexual partners in the past. All of her prior sexual partners had previously experienced heterosexual intercourse.

Her physical examination was essentially normal

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FIGURE 1

The colposcopic photograph demonstrates a large, moderately acetowhite lesion on the anterior and posterior lips of the cervix. The margins are fairly smooth and straight. A coarse mosaic and punctuation vascular pattern were noted.



and a Pap smear was obtained, which was interpreted as CIN 2 or high-grade squamous intraepithelial lesion (HSIL). The patient was scheduled for a colposcopic examination.

Before performing colposcopy, two samples were obtained from the cervix for HPV DNA testing. First, a dacron swab was wiped across the cervix and into the endocervical os. This was placed into a Hybrid Capture specimen transport tube (Digene Diagnostics, Silver Spring, Md) and tested for HPV DNA using the Hybrid Capture method and the probe for high oncogenic risk that detects HPV types 16, 18, 31, 33, 35, 45, 51, 52, 56. The other specimen was a 10-mL cervicovaginal lavage, which was collected and analyzed for HPV DNA by polymerase chain reaction (PCR) as previously described using L1 consensus primers.³ Two cervigrams were then taken of the cervix following 5% acetic acid application.⁴ The colposcopic examination (Figure 1) revealed a large acetowhite lesion on the anterior and posterior lips of the cervix. The lesion margins were smooth and straight in contour, but also included several small satellite lesions at the 3 o'clock position. A coarse mosaic and coarse punctuation vascular pattern were noted at 3 o'clock. The lesions rejected Lugol's iodine (iodine-negative epithelium) and appeared mustard yellow but also variegated in color (Figure 2). A Reid's Colposcopic Index Score of 5/8 (1,1,2,1) was assigned, indicative of a high-grade cervical intraepithelial lesion.⁵ The colposcopy examination was determined to be satisfactory. Two

cervical biopsies were obtained and endocervical curettage was performed. The colposcopic examination of the vagina and vulva revealed no epithelial abnormalities.

The cervical biopsy sample (Figure 3) was diagnosed as CIN 2. The endocervical curettage was negative. A high oncogenic risk HPV was detected in this patient using the Hybrid Capture method. HPV DNA was also detected in the cervicovaginal lavage by PCR. However, the amount of amplified HPV DNA product was insufficient to allow accurate typing of the HPV that was present using the restriction fragment length polymorphism method used in the laboratory. The patient was treated by an electrosurgical loop excision of the cervical transformation zone.⁶ The histologic interpretation of the surgical specimen revealed chronic cervicitis with severe thermal artifact. The patient was then followed by serial cervical cytology tests and colposcopic examinations during the first postoperative year.

The patient's 29-year-old, GI PO Abl, lesbian sexual partner was also examined. Her history was pertinent for heterosexual intercourse 8 years previously. She had had nine male and five female partners in the past. During the past 3 years she had maintained a monogamous sexual relationship with her current partner. Their current sexual relationship included the use of sex toys used interchangeably and involving penetration of both partners. In addition, the women admitted to digital vaginal penetration and oral sexual stimulation of the genitalia. The partner's last Pap smear, taken approximately 5 years previously, was apparently normal. Although during the past 12 months she informed three different primary care clinicians of her lack of a recent Pap smear each clinician told her that Pap smears were unnecessary given her lesbian sexual orientation.

Her Pap smear was reported as a satisfactory sample but limited by obscuring blood and inflammation and was within normal limits. A cervicovaginal lavage specimen was tested for HPV using PCR and L1 consensus primers and no HPV DNA was detected. Her colposcopy examination was satisfactory and revealed no evidence of current cervical neoplasia.

DISCUSSION

This is one of the first reports of a cervical high-grade CIN associated with a high oncogenic risk

HPV type in a lesbian woman who had no history of heterosexual intercourse. There are several mechanisms that might explain how an anogenital HPV infection may have been acquired by this patient. Possible explanations include transfer of HPV by use of the sex toy, digital intromission, or, perhaps, through oral genital sex. Potential fomite transmission of HPV has been demonstrated for rubber exam gloves,⁷ biopsy forceps,⁸ cryoprobe tips,⁸ and vaginal speculae.⁹ However, infectivity by these transmission vehicles has not been demonstrated.

The patient denied ever using tampons and adamantly denied a history of sexual abuse. It is feasible that the suppression of a prior traumatic heterosexual exposure could explain the origin of her cervical disease.

A significant familial or genetic susceptibility to cervical neoplasia may have also facilitated the development of the woman's cervical neoplasia. Rarely, laryngeal papillomatosis and conjunctival and anogenital condyloma in neonates may be contracted at parturition from mothers with anogenital warts. Vertical transmission of HPV, although possible, may be an implausible explanation for the development of cervical neoplasia.

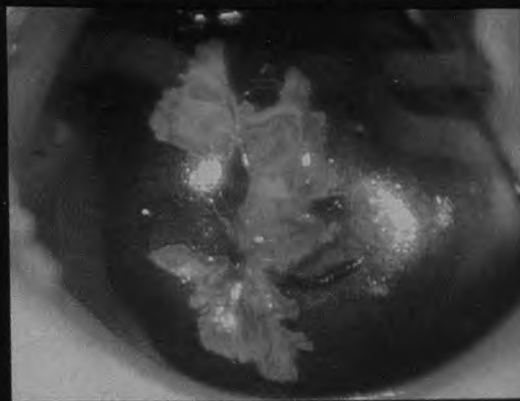
It should be emphasized that the patient's current partner was HPV DNA negative and had no gross or colposcopic evidence of an HPV-associated lesion. Yet, it is possible that the partner previously had a cervical lesion that transmitted infection but subsequently resolved. Alternatively, the woman may have been infected by a prior female partner more than 3 years ago.

It is often thought within both the medical profession¹ and lesbian community¹⁰ that lesbian women are at negligible risk for sexually transmitted diseases (STDs) and cervical neoplasia. Many publications have noted that STDs are reported less commonly in lesbian women.^{2,11-13} This view, however, fails to take into account that 75% to 90% of lesbian women have had heterosexual coitus at some point in their lifetime.^{1,11,12}

There are limited data available concerning cervical neoplasia and HPV-associated lesions in lesbian women. One study from the United Kingdom detected genital warts in 16.7% of lesbian women, compared with 5.4% of all women examined at a genitourinary clinic.¹⁴ The incidence of cervical atypia in lesbian women was approximately 2% or about one half that of the general population.^{2,13} However, the

FIGURE 2

The colposcopic photograph of the Lugol's iodine-stained cervix demonstrates iodine-negative epithelium with some variegated (mustard yellow and mahogany brown) areas.

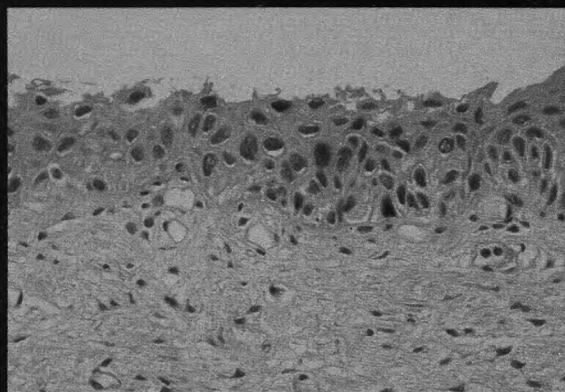


majority of women included in these studies were either bisexual or had a prior history of heterosexual intercourse, and little data are available concerning the presence of cervical neoplasia in lesbian women with no history of heterosexual intercourse. Furthermore, these limited data, now nearly 20 years old, are perhaps not reflective of a greater prevalence of HPV currently. Edwards and Thin reported one case of CIN 1 and vulvar condyloma in a lesbian woman who reported no history of heterosexual intercourse.¹⁴

Our case report highlights the frequent neglect of lesbian women in regard to screening for cervical neoplasia. The patient's sexual partner was denied Pap smear screening by three different physicians within 1 year because of her sexual orientation. Both the patient and the partner indicated that prior unpleasant encounters with conservative and judgmental physicians negatively influenced their compliance with Pap smear testing. This does not seem to be an uncommon occurrence. Health surveys have reported that 10% of female homosexual respondents have either never had a Pap smear or that it has been 10 years or more since their last Pap smear.¹⁵ In lesbian women undergoing Pap smear screening, the interval between obtaining Pap smears is nearly three times greater than for heterosexual women.¹³ Furthermore, we initially ignored the sexual partner's relative indication for a colposcopic examination based on the presence of cervical neoplasia in the patient. It is a common but controversial practice to colposcopically evaluate female sexual partners of heterosexual men discov-

FIGURE 3

The cervical histology demonstrates squamous neoplasia involving the lower two-thirds of the epithelium. Hematoxylin and eosin stain. Original magnification X100.



ered to have genital HPV-related disease.

Benign neglect results from the misperception of cervical cancer screening needs by both clinicians and lesbian women.^{10,11} A lack of previous heterosexual history disclosure by a majority of lesbian women and a lack of awareness of female-to-female transmission risk contributes to the dilemma. A clinician's failure to recognize a universal need for cervical cancer screening of lesbian women kindles negligent practice. Because Pap smear testing is frequently linked to mandatory annual health maintenance examinations for contraceptives, many lesbian women may be innocently neglected in regard to serial cervical screening.

Nonjudgmental recognition of sexual practices enables clinicians to care for their patients appropriately.¹⁶ All adult women, regardless of history of heterosexual intercourse or recent sexual activity, should receive regular cervical cytology screening and pelvic examinations. The frequency of examinations should be determined by each patient's unique risk factors. A large survey of lesbian women demonstrated that 12% had a self-reported history of an abnormal Pap smear compared with 16% of bisexual women.¹¹ Thus, cervical screening is certainly war-

ranted for lesbian women. Although coitus is universally presumed to convey a risk for cervical neoplasia, as demonstrated in this case report, HPV transmission by other sexual means and resultant development of cervical neoplasia dictate that all women, lesbian, bisexual, or heterosexual, receive routine cervical cancer screening tests.

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