FOCUS ON VIRAL INFECTIONS

Psychosexual Impacts of Human Papillomavirus

As a first-line resource, physicians have a crucial responsibility to provide HPV patients with counselling suited to their needs. This requires physicians to go beyond their traditional roles and adopt fuller, more personalized counselling.

By Catherine Vezina, BA, MA, and Marc Steben, MD, CCFP, FCFP

Presented at The 18th International Conference on the Papillomavirus, Barcelona, Spain, July 2000.

Why do 60% of persons infected with the human papillomavirus (HPV) say they are dissatisfied with the information and care received from their physician at the time of diagnosis? Are physicians sufficiently aware of the many emotional, relational and sexual consequences of HPV infection and treatment? This article will review the psychologic and sexual effects of the infection and give suggestions for meeting the needs of HPV patients in the best possible way.

HPV causes a viral infection that is difficult to understand and to manage, not only for those who are infected, but also for attending physicians. Many factors make managing the clinical signs of HPV a complex task: its unpredictable course; the many forms that clinical signs can take (Table 1 and Figures 1 to 7); the fact that people can be chronic asymptomatic carriers; the fact that this sexually transmitted disease (STD) is possibly oncogenic; and the varied impacts of the different treatments.

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Figure 1. Abnormal colposcopy following cytology, showing an intraepithelial lesion.

Figure 2. Condyloma acuminata of the vulva.

Figure 3. Condyloma acuminata on the frenum of the glans.

Figure 4. Vulvar condylomas.

Figure 5. High-grade (ulcerated) and low-grade (white and pigmented) intraepithelial lesions.

Figure 6. High-grade ulcerated epithelial lesion in an 18-year-old girl.
### Table 1

#### Characteristics of HPV Infection

**How long do the lesions last?**

In human papillomavirus (HPV) infection, the duration of lesions depends on several factors, including smoking, genetic factors, whether the patient is HIV-positive, and other factors, which are still not well understood. The majority of women recover from HPV in less than two years without treatment. It appears the state of being a carrier is generally temporary—only women with high-risk oncogenic HPV remain long-term carriers.

**How dangerous are the lesions?**

The dangerousness of the lesions varies, ranging from the state of asymptomatic carrier (most common) to: low-risk intraepithelial lesions, which often heal spontaneously without treatment; highly malignant intraepithelial lesions; and, at the top end of the danger scale, invasive lesions that are potentially fatal.

**Which organs are most often affected?**

The organs most often affected are the lower genital organs. In women, the cervix (the squamous and glandular parts), vagina and perineum can be affected. In men, the penis and scrotum can be affected, but rarely the urethra. In both sexes, the anal and perianal areas can be contaminated even without direct sexual relations, through self-inoculation or from unintentional rubbing. The groin and pubic region also can be affected. Lastly, the throat and non-genital skin may rarely be areas liable to infection.

**How long is the incubation period?**

The incubation period for condylomas ranges from a few months to a few years, while for highly malignant lesions it is many years.

**How are HPV infections treated?**

Treatments generally take time, and are usually painful. Success rates are variable. Most patients choose a topical treatment, which they can administer at home instead of cryotherapy or laser treatment. Relapse rates are lower with imiquimod. It has not been proven that administering treatments, such as cryotherapy at a fast rate (i.e., once per week) is more effective than a more moderate approach (i.e., once per month).

**What are the clinical signs of HPV infection?**

- Lesions that cannot be seen by the naked eye, by microscope or by colposcopy, but can be detected with nucleic acid amplification tests.
- Intraepithelial subclinical lesions detected with the Papanicolaou test or a colposcopy (Figure 1).
- Condyloma acuminata (Figures 2, 3 and 4).
- Visible pre-cancerous lesions (Figure 5).
- Cancerous lesions (Figures 6 and 7).
The Psychologic Impacts Of A Diagnosis Of HPV Infection

HPV infection is a disease for which clear answers are rare. Diagnosis can be expected to have repercussions in different spheres of the infected person’s life, such as physical and sexual health, and social and interpersonal relations (Table 2).

ANGER is one of the most common emotional reactions in persons infected with HPV: 78% say they feel or have felt anger. The object of the anger, however, varies from one person to another. Some direct their anger at the person who infected them, while others turn their anger on themselves or the physician who determines the diagnosis.

Anger toward the person who transmitted the HPV. For many people living with HPV, the anger they feel after learning of the diagnosis is directed mainly at the person who infected them. The anger is amplified by the hurt associated with the belief (whether justified or not) they have been betrayed, lied to or have not been warned of the possible risks of STD transmission.

Patients manage this anger in different ways. Some keep their anger buried deep inside themselves, while others, hoping to free themselves of their anger, will take it out on the person they believe to be responsible for their infection. In rare cases, some patients will go so far as to take legal action against the person who infected them.

Anger toward the attending physician. Anger also may be directed toward the physician who diagnosed the HPV infection. Frustration felt by infected people is frequently connected with their deep dissatisfaction with the quality of care received from the attending physician. A study by the American Social Health Association (ASHA) shows that close to 60% of people infected with HPV describe the service they received from their physician when the diagnosis was announced as unsatisfactory.1 The greatest degree of dissatisfaction stemmed from the fact that the physician did not bother to provide them

Table 2

<table>
<thead>
<tr>
<th>Emotional Reactions</th>
<th>At the time of diagnosis</th>
<th>During the year preceding questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td>78%</td>
<td>44%</td>
</tr>
<tr>
<td>Depression</td>
<td>76%</td>
<td>37%</td>
</tr>
<tr>
<td>Feeling of isolation</td>
<td>70%</td>
<td>39%</td>
</tr>
<tr>
<td>Fear of rejection</td>
<td>70%</td>
<td>40%</td>
</tr>
<tr>
<td>Shame</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>Guilt</td>
<td>60%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Figure 7. High-grade intraepithelial papular lesion in a pregnant woman. The patient died five months after the diagnosis.
with information on the emotional aspects of HPV (84%) and that he or she also omitted to question them about their sexual practices in order to provide them with the best possible care (76%). A lack of information on the medical aspects of HPV also added to the dissatisfaction of a substantial proportion of respondents (81%). They complained they were given no references to an information flyer, a help line or a Web site that could provide them with further information about HPV, and 60% were not given any reading material on HPV.

Another point with which some people expressed great dissatisfaction was the physician’s negative attitude during consultations. A number of patients felt very uncomfortable faced with the doctor’s “judgmental,” “moralizing,” “closed” and “hasty” attitudes toward them. Lastly, as a result of the intense anger and disappointment they felt with the care received, close to 60% of people infected with HPV took steps to consult another physician in the hope of finding someone with an attitude more conducive to satisfactory handling of their health.

People living with HPV may feel anger toward their physician if he or she chooses—advisedly in some cases—to provide painful treatment, such as laser therapy or electrocauterization without taking the patient’s expectations into account. These painful treatments often require the patient to stay away from work and may cause long-term effects, such as discoloration of tissue or scars that are painful, especially during intercourse (Figures 8 and 9). Some treatments, such as imiquimod and podophyllotoxin, require few visits and can be applied at home. Recurrences are another source of anger toward physicians. Studies have shown a lower rate of recurrence with imiquimod.

Anger toward oneself. Some HPV patients’ anger is primarily directed at themselves. This reaction is found in people who have self-deprecating behavior, who judge and condemn themselves harshly for contracting the STD. In extreme cases, some people will go so far as to punish themselves for becoming infected with HPV by adopting, often unconsciously, attitudes that are harmful to their psychologic and physical well-being (e.g., depriving themselves of treatment, or resources or human contacts that could help them overcome their difficulties in living with HPV.

Depression. After hearing the diagnosis of HPV, 76% of patients experience depressive feelings. These feelings usually manifest in the following way: the infected person has a very negative view of what life will be like with this STD, and feels powerless and desperate. After diagnosis, infected peo-
ple are frequently observed to suffer a significant decrease in self-esteem. They perceive themselves as being dirty, impure, a “walking virus” or a “leper.” Many think the infection significantly reduces their personal worth. Most infected people feel great sadness at the idea that the diagnosis will bring many losses:

- Loss of health;
- Loss of sexual freedom;
- Loss of their partner(s); and

Many patients have difficulty following their usual occupations and find their spheres of interests becoming restricted. In some cases, the emotional pain attached to the diagnosis is so unbearable the patient has suicidal thoughts or actually attempts to take his or her own life.

Isolation. When the diagnosis of HPV is given, 70% of patients seek to isolate themselves from those around them. Some feel such shame (66%) and guilt (60%) at being infected they make every effort to prevent anyone from finding out about their state of health. Many patients choose to keep their diagnosis secret even if it means they will have to forgo the emotional support those close to them could provide.

Fear of being judged, of being rejected (70%) or of transmitting the infection explains why patients keep silent about the diagnosis and why many avoid embarking on new sexual relationships. It is not uncommon for infected people to resign themselves to remaining single temporarily or permanently, or to avoid any sexual relations to protect themselves from the negative reaction they might encounter when they reveal they are infected with HPV.

**Anxiety.** HPV sufferers often feel anxiety when they learn of the diagnosis. In a 1998 study, 52% of men and 62% of women showed themselves to be very worried by the fact they were infected with HPV. The unpredictable nature of the infection generally contributes to such feelings of anxiety. Many infected people, for example, expressed numerous fears about what the future with HPV held for them (Table 3).

Some become obsessed with these worries; they think about HPV every day, several times a day. In other patients, the intensity of the worry decreases gradually as information on HPV is assimilated and they receive support from those close to them.

**Impacts of HPV Treatment**

The treatment of HPV infection itself has important psychosexual repercussions in certain patients. Table 4 shows the psychosexual impact of treatment of HPV infection.

**Impacts of HPV on Sexuality**

Infection with a viral STD, such as HPV, invariably brings about certain changes in the way people with HPV conduct their sex lives (Table 5).

**Approaching new sexual partners.** For up to 86% of people living with HPV, the manner of entering into a relationship with a sexual partner changes significantly. For many, sexual relations occur much

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**Table 3**

**Fears Among HPV-Infected Patients**

- Fear of HPV’s impact on their health.
- Fear of transmitting the virus.
- Fear of rejection.
- Fear of treatments.
- Fear of telling partner(s) of infection.
- Fear of being found out.
- Fear of being judged.
- Fear of recurrence.
- Fear of not being able to come to terms with disease.
later in the relationship than in the past. Some people wait until a mutual commitment and trust is established before beginning sexual relations with a new partner, while others wait until their treatment is complete.

Sexual spontaneity. A diagnosis of HPV infection generally affects patients’ feeling of sexual freedom. About 73% of infected people complain the disease interferes with their sexual spontaneity. They find it difficult to proceed with their desire in the way they would like and at the time they would like because they have to think of the risk of contagion, about wearing a condom, etc.

Feeling undesirable. Being infected with HPV causes a considerable number of patients to have a very negative image of their own body. Many feel having an STD completely destroys their desirability or sexual attractiveness to a partner. This feeling

### Table 4

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Percentage of successfully treated cases</th>
<th>Percentage of recurrence</th>
<th>Psychosexual impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Podophyllin</td>
<td></td>
<td></td>
<td>Local effects</td>
</tr>
<tr>
<td>Podophyllotoxin</td>
<td>45% to 48%</td>
<td>33% to 60%</td>
<td>Local effects</td>
</tr>
<tr>
<td>Trichloro-acetic acid</td>
<td>20% to 70%</td>
<td>40% to 70%</td>
<td>Local effects, numerous visits</td>
</tr>
<tr>
<td>Cryotherapy</td>
<td>68%</td>
<td>38%</td>
<td>Pain, numerous visits</td>
</tr>
<tr>
<td>CO₂ laser vaporization</td>
<td>27% to 82%</td>
<td>7% to 72%</td>
<td>Pain requiring stoppage of work and sexual relations</td>
</tr>
<tr>
<td>Electrocauterization</td>
<td>N/A</td>
<td>N/Av.</td>
<td>Pain requiring stoppage of work and sexual relations</td>
</tr>
<tr>
<td>Interferon</td>
<td>32% to 60%</td>
<td>65%</td>
<td>Pain, very costly, systemic effects (fever, myalgia)</td>
</tr>
<tr>
<td>Imiquimod</td>
<td>50% to 71%</td>
<td>10%</td>
<td>Local effects</td>
</tr>
<tr>
<td>the study</td>
<td></td>
<td></td>
<td>Preferred treatment in Phase IV of Canadian study [unpublished]</td>
</tr>
<tr>
<td>5 FU</td>
<td>N/Av.</td>
<td>N/Av.</td>
<td>Teratogenic, severe burns</td>
</tr>
<tr>
<td>5 FU: fluoro-5-uracile; N/A: not available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 FU</td>
<td></td>
<td>N/Av.</td>
<td>Vaginal adenosis, contact bleeding</td>
</tr>
<tr>
<td>5 FU: fluoro-5-uracile; N/A: not available</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Human Papillomavirus

is still more intense in patients who show visible signs of HPV, such as genital condylomas. These patients often find it extremely difficult to see themselves as desirable, as part of their body clearly shows they are suffering from a contagious STD.

Many patients feel this loss of desirability is permanent and cannot be helped. They also feel they will never recover their ability to arouse sexual desire and pleasure. They say, “HPV has changed things forever,” or “The disease makes me feel tarnished, far from the standard of beauty and the sexy look that we see every day in advertising, shows and the media.”

Frequency of sexual activity. For many, living with HPV brings about significant changes in the frequency of sexual activity. It may be reduced by several times per week or month; there may even be a complete stoppage of all sexual activity.

Less frequent sexual relations are often accompanied by a loss of interest in sex. Sexual relations are spaced out or stopped because sexual desire is no longer present. Other patients still feel the drive to remain sexually active, but they choose not to act on it because of the many fears they feel.

On the other hand, the reduction in the frequency of sexual relations is often accompanied by a marked increase in the number of non-sexual intimate exchanges. Patients often discover new ways of sharing intimate contact with their partner: they engage in touching that does not involve the genitals and focuses on tenderness, which satisfies some of their emotional needs.

Pleasure during sexual relations. Many patients complain the quality of their sex lives has dropped since diagnosis. For some, orgasmic capacity is affected. They have more difficulty reaching orgasm, or find the sensations produced by the orgasm are less intense. Others are unable to reach a sufficient level of excitement for climax to occur.

Patients’ Need For Counselling
The diagnosis of HPV infection has major repercussions on the infected person’s life, at both the psychologic and sexual level. The infected person’s life is often turned upside-down, causing distress, which deserves careful attention. After receiving the diagnosis, it is clear that many patients badly need help to adapt to their new reality. The person best placed to fill this role is often the physician. Moreover, many patients expect their physician to provide more than medical help when announcing the diag-

Table 5
Feelings and Sexual Behaviors Most Affected By Diagnosis of HPV

<table>
<thead>
<tr>
<th></th>
<th>At the time of diagnosis</th>
<th>During the year preceding questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approaching a new partner</td>
<td>86%</td>
<td>71%</td>
</tr>
<tr>
<td>Sexual spontaneity</td>
<td>73%</td>
<td>50%</td>
</tr>
<tr>
<td>Patient no longer feels desirable</td>
<td>72%</td>
<td>47%</td>
</tr>
<tr>
<td>Frequency of sexual relations</td>
<td>72%</td>
<td>48%</td>
</tr>
<tr>
<td>Sexual pleasure</td>
<td>68%</td>
<td>42%</td>
</tr>
</tbody>
</table>
Patients’ most pressing needs for medical counselling have to do with the physician’s attitude and the information on HPV that he or she provides them regarding HPV. According to *Stedman’s Medical Dictionary*, counselling is a “relationship and professional activity in which one party’s attitude helps the other to understand and resolve his or her difficulties through the provision of suggestions, opinions and information that will guide his or her judgment and behavior.”

**Respect.** The attending physician must show respect for HPV-infected patients’ state of health, as well as for the questions they ask, their understanding of HPV and their lifestyle. It is vitally important the patient feel that the physician makes no moral judgment and does not underestimate the extent of the disease’s effects on the patient.

**Empathy and openness.** During medical counselling, empathy and open-mindedness are two of the most helpful attitudes a physician can show. It is essential the physician demonstrate that he or she understands and accepts the emotions felt by the patient, and that he or she does not judge the patient for contracting the infection. If the physician gives the patient a warm welcome and recognizes the importance of his or her emotional state, this will unquestionably help the patient to adapt.

**Careful attention.** It is essential the patient feel that the physician is paying attention to what he or she is saying and takes the time to answer questions clearly. Also, for many patients, it is important the physician dwell on their emotional state, support them and give advice that will help them to cope with their state of health.

### Table 6

**Desired Traits In Attending Physicians Sought By HPV-Infected Patients**

<table>
<thead>
<tr>
<th>Trait</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Respect</strong></td>
<td>The physician makes no moral judgment regarding the patient’s lifestyle.</td>
</tr>
<tr>
<td><strong>Empathy and openness</strong></td>
<td>The physician accepts the patient’s experience with warmth and understanding.</td>
</tr>
<tr>
<td><strong>Attention</strong></td>
<td>The physician takes the time required to answer the patient’s questions fully and concentrates on them exclusively.</td>
</tr>
<tr>
<td><strong>Availability</strong></td>
<td>The physician schedules longer appointments when announcing the diagnosis and suggests follow-up appointments, as needed.</td>
</tr>
<tr>
<td><strong>Clarity</strong></td>
<td>The physician provides the information in a clear and simple manner, ensuring the patient properly understands.</td>
</tr>
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</table>
Information For The Patient

What information should be given? It is vitally important that physicians understand HPV well enough to provide patients with information that will help them to understand their infection better. The information must be accurate and current. If the physician does not have an answer to all the questions asked, patients expect that he or she will tell them so and take the initiative to find out the answers before the next meeting.

The information patients want falls into two categories: information on the medical, emotional and sexual aspects of HPV; and information on documents and resources available for HPV-infected people. Table 7 shows the main points patients want their physician to address.5

How to communicate the information. Because of the large number of topics that need to be covered, it is wise to schedule longer appointments for announcing the diagnosis. It also is highly recommended to schedule one or more follow-up appointments, so the physician can make sure the patient properly understands the information he or she has been given. Also, to help the patient understand the information provided, the physician must give it in a simple, easy-to-understand form and must constantly check with the patient to make sure that he or she has understood the information correctly.

Further, to encourage patients to actively take charge of their health between follow-up appointments, the physician can give them literature and information on resources available for HPV patients (Table 8). In this way, patients will have a tangible
Conclusion
The diagnosis of HPV brings about a series of psychosexual consequences for infected people. They experience a wide range of difficult emotions, which invariably cause changes in the way they experience their social, loving and sexual relationships.

During medical counselling, it is important that physicians take into consideration the psychosexual reactions of patients who consult them. Because they often are the first-line resource for HPV patients, physicians have a crucial responsibility toward them. This responsibility is to provide patients with counselling suited to their needs. People infected with HPV expect their doctor not only to supply them with the requisite medical care, but also to adopt an attitude that will help them deal with the psychosexual consequences of the disease. Openness, empathy and careful attention are vital in reaching this goal. Moreover, quality information given in a clear and simple manner will help patients take their own state of health in hand.

In other words, to provide effective and satisfying counselling to HPV patients, physicians must go beyond their traditional role and adopt a fuller, more human counselling role. If the physician feels unable to provide such a service, either wholly or
human papillomavirus

Table 7

Information For HPV-Infected Patients

Medical information on HPV
- Prevalence.
- Modes of transmission and prevention.
- Signs, symptoms and possibility of recurrence.
- Consequences for future health.
- Risk of cancer.
- Available treatments, effectiveness, secondary effects.
- Chances of recovery.

Information on emotional and sexual aspects of HPV infection
- Proportion of patients who show psychosexual repercussions following a diagnosis of HPV infection.
- Possible psychologic and sexual reactions following a diagnosis and their prevalence.
- Types of sexual activity that will not transmit infection.
- Resources to help patients cope with the emotional and sexual aspects of HPV infection (e.g., support groups, information).
- Ideas of how to share the news of one’s diagnosis with a partner.

HPV resources
- Various services available to people living with HPV: help and information lines, support groups, specialized HPV physicians and therapists.
- Various reference documents on HPV: books, journals, videos and Internet sites.

Table 8

Helpful Resources For HPV-Infected Patients

Ruban en Route
Tel: (514) 855-8995
E-mail: ruban-en-route@qc.aira.com.
This organization was formerly of the Centre de ressources et d’interventions en santé et sexualité, a community organization focused on prevention, education and support related to STDs (especially viral) and sexual health in general. The different services offered are:
- STD help and information line
- HSV and HPV support group
- Psychosexual consultation

The American Social Health Association
Tel: (919) 361-8400
Fax: (919) 361-8425
Internet site: www.ashastd.org
This organization publishes HPV News every three months.

All figures were provided by Dr. Marc Steben.

Recommended reading:

References