The Pap Smear: Guidelines for Screening and Follow-up

The incidence of and mortality from cervical cancers have decreased with the Pap smear’s opportunistic use in Canada. The rate of decline has eased, however, suggesting that our current opportunistic methods have reached their limitations. New approaches must be taken.

By Robert J. Lotocki, MD, FRCSC

Cervical cancer is one of the most common malignancies in the world. Most cases of carcinoma of the cervix occur among the economically disadvantaged—both in developing and industrialized nations. The incidence of and deaths from cervical cancer have dropped with the introduction and success of existing Papanicolaou (Pap) smear screening programs. In Canada, with current opportunistic screening, cervical cancer ranks eighth in incidence and eleventh as a cancerous cause of death. Cancer of the cervix ranks third in incidence between the ages of 20 and 34, and second in women between age 35 and 49.

The National Cancer Institute of Canada estimates that, in the year 2000, there will be 1,450 new cases of cervical cancer, accompanied by 430 deaths in Canada. There are considerable regional variations, with higher rates in the Atlantic and northern regions, and lower rates in Quebec and Western Canada. In some provinces, the incidence of cancer of the cervix appears to be increasing (Figure 1).

Almost one-half of newly diagnosed cases of invasive cervical cancer fall into the category of "no cytology or cytology longer than five years ago." Approximately 82% of women who participated in the 1994 National Population Health Survey (NPHS) reported having had a Pap smear at least once. Almost 68% reported having a smear within three years of the survey. The incidence and mortality from cervical cancer can be reduced by extending screening to those women currently not being screened or those who are under-screened. Mortality also may be reduced by continuing research into defining precursors for histology subtypes, such as adenocarcinoma, and by potentially novel approaches, such as immunization against human papillomavirus (HPV).

Dr. Lotocki is associate professor, gynecological oncology, University of Manitoba, head, gynecology, St. Boniface General Hospital and Medical Director, Manitoba Cervical Cancer Screening Program, Winnipeg, Manitoba.

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Figure 1. Cancer of the cervix: Incidence and mortality. Manitoba versus the Canadian national average.

**Limitations of Opportunistic Screening**

Squamous cell cervical cancer is ideal for screening because of a typically long pre-clinical course and established cytology precursors. It is claimed that Pap smear screening can prevent approximately 90% of squamous cervical cancer and a lesser amount of glandular cancers. Squamous cell carcinoma (80% of all histology subtypes) has well-defined precursors, whereas adenocarcinomas (15% of subtypes) does not. The decreasing incidence and mortality rates for squamous cervical cancer masks a concurrent increase in adenocarcinoma. The incidence of squamous cell cancers declined by 3.2% per year between 1984 and 1992, whereas the incidence of adenocarcinomas increased by 4% during the same period.

The current slowing of the downward trend in the incidence of invasive squamous cell carcinoma, combined with an increasing incidence of cervical adenocarcinoma, suggests that benefits of opportunistic screening have been maximized. An organized approach to Pap smear screening is required to further reduce the incidence of this disease, by increasing screening in women who are not being screened or who are under-screened. There is a strong correlation between the intensity of screening and the reduction in mortality from cancer of the cervix.

Women and health professionals need to be aware, however, that the Pap test has limitations. An organized program could address other factors including false-negative smears, inadequate management and follow-up of abnormal smears. Improper technique in obtaining or preparing the Pap smear accounts for two-thirds of false-negatives, while laboratory errors are responsible for the remaining one-third. Hence, there is further opportunity to reduce the incidence of, and mortality from, invasive cancer of the cervix.
Human Papillomavirus
There is a strong association between persistent infection with high-risk HPV subtypes 16, 18, 31, 35, etc. and cervical cancer and its precursors. HPV deoxyribonucleic acid (DNA) is present in approximately 93% of cervical cancer and its precursors. HPV genes E6 and E7 are integrated into the host genome. The virus has a peak prevalence of infection in women in the 22- to 25-year age groups. The association between persistent HPV infection may explain the positive association between cervical cancer and other risk factors, such as early age of first intercourse, early age of marriage, early age of pregnancy, multiple pregnancies and multiple sexual partners (either the patient’s or her partner with multiple sexual partners).

Since HPV is widely prevalent, a variety of co-factors and molecular events must presumably occur between HPV infection and the development of cervical cancer or its precursors. Cigarette smoking appears to be a major co-factor. Deficient nutrition may affect the risk of persistent infection, lesion development or both. The prevalence of infection decreases with increasing age, suggesting that most infections resolve over time (presumably through host immune responses).

Prophylactic and therapeutic vaccines against HPV may offer the potential for prevention and management.

Organized Program
The limitations of opportunistic screening strategies were recognized by the 1973 Conference of Deputy Ministers of Health. A task force, chaired by Dr. R.J. Walton, produced a report that included the necessary components for an organized program screening. There has been general acceptance of this report nationally and internationally, as well as subsequent reports in 1982 and 1989.

Several countries, such as the Scandinavian countries, Australia and Great Britain, have developed national organized screening programs. Although the incidence of cervical cancer in Canada is lower than in many Western countries, it is higher than many of these jurisdictions that have developed nationally organized screening programs. Mortality decreased by 80% over two years with an organized screening program in Iceland; 50% in Finland; and 34% in Sweden.

In Canada, implementation has proceeded slowly at the regional level, rather than the national level. Health Canada has sponsored a number of national documents that have helped provincial jurisdictions develop their own screening programs. As a result, there are regional variations across Canada, ranging from opportunistic screening to organized screening programs.

Unfortunately, attention in both the lay and medical press has focused on the quality of laboratories, rather than on achieving optimal coverage. This has been the basis of increasing litigation.

There are key components to consider when implementing an organized screening program:

- Identification of the population;
- Method of recruitment/retention;
- Sampling and handling of smears;
- High-quality laboratory services;
- Evaluation and management;
- Method to monitor and evaluate; and
- Quality assurance.

Identification of the population. In order for a comprehensive screening program to be effective, there must be a population-based information system, with links to cancer registries, laboratories providing cytology and histology results and colposcopy.
Screening for cancer of the cervix should begin with the history of sexual activity. Although, there is evidence to suggest screening should begin at age 18, there is no evidence to suggest an upper age where cervical screening should stop. Although screening programs may recommend different upper age limits for stopping screening, a healthy individual with minimal co-morbid disease should not be discouraged from continuing to have Pap smears.

Recommendations for screening intervals vary from country to country, from province to province and between professional organizations. Screening every two to three years is not associated with a significant risk of invasive cancer above the risk expected with annual screening. In the absence of an organized screening program, Pap smears should be continued annually. An organized screening program would develop approaches to screen the unscreened or under-screened; create a uniform approach to screening techniques and management; and ensure quality assurance. Furthermore, a population-based information system would permit timely recall and create a fail-safe mechanism for follow-up of positive smears.

With linkages to histology and an individual's Pap smear history, women who have had a hysterectomy could be managed with more logic. Smears should be continued in women who have had dysplasia or gynecologic malignancies—either prior to or with a histology examination of the hysterectomy specimen. Women who have had a hysterectomy for benign conditions and no previous abnormal smears could stop being screened because they have a low prevalence of vaginal dysplasia (0.1%) and a high false-positive rate.

**Method of recruitment/retention.** Screening efforts can be targeted to reach women who do not receive regular screening. These women include: those over 65 years of age; those who are aboriginal; those from a lower socioeconomic status; those less educated; members of minority groups; rural residents with a high physician turnover; recent immigrants whose mother tongue is neither English nor French; and those infected with HIV (Table 1).

To improve screening in these defined subgroups, reasons for nonparticipation must be determined and addressed with appropriate interventions. The educational information provided must be directed to these subgroups to improve their knowledge, attitudes and behaviours toward the benefits of cervical screening. Community-based approaches, with involvement of local leaders, volunteers or service groups, may help reach diverse ethnic populations through education and awareness efforts. Culturally sensitive and linguistically compatible staffing would make the test somewhat more acceptable. Other logistical problems associated with screening in both urban and rural settings may include transportation, child-care and accessible screening services.

### Table 1

**Risk Factors That Predispose Women to Develop Cervical Cancer**

- Not having regular Pap Smears
- Having infrequent Pap smears
- Women older than 65 years
- Being of Aboriginal original
- Lower socioeconomic level
- Multiple sexual partners
- Intercourse at an early age
- Compromised immune system (i.e., HIV or using immune-suppressants)
- Sexual partners who are infected with HPV or who have had multiple sexual partners
- Recent immigrants
- Rural residents
- HPV infection
- Smoking

HIV = human immunodeficiency virus
HPV = human papillomavirus
### Table 2
### The 1991 Bethesda System

#### Section I. Statement of Adequacy

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory for evaluation (transformation zone component is present)</td>
<td></td>
</tr>
<tr>
<td>Satisfactory for evaluation but limited by:</td>
<td></td>
</tr>
<tr>
<td>- Transformation zone component is not present</td>
<td></td>
</tr>
<tr>
<td>- 50% to 75% of the epithelial cells are obscured by: blood, inflammation, thick areas, poor fixation, air drying artifact, contamination</td>
<td></td>
</tr>
<tr>
<td>Unsatisfactory for evaluation:</td>
<td></td>
</tr>
<tr>
<td>- Squamous cells cover &lt; 10% of slide surface</td>
<td></td>
</tr>
<tr>
<td>- 75% of the epithelial cells are obscured by: blood, inflammation, thick areas, poor fixation, air drying artifact, contamination</td>
<td></td>
</tr>
</tbody>
</table>

#### Section II. Diagnostic Categories

**Within normal limits**

Benign cellular changes: Trichomonas vaginalis, yeast, cellular changes associated with Herpes simplex, bacteria morphologically consistent with Actinomyces species

Reactive cellular changes associated with: inflammation (includes typical repair), atrophy with inflammation ("atrophic vaginitis"), radiation, intrauterine contraceptive device (IUD)

Other, specify

### Epithelial Cell Abnormalities

#### Squamous Cells

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atypical squamous cells of undetermined significance (ASCUS):</td>
<td></td>
</tr>
<tr>
<td>ASCUS, favor reactive changes</td>
<td></td>
</tr>
<tr>
<td>ASCUS, favor low-grade squamous intraepithelial lesion (LSIL)</td>
<td></td>
</tr>
<tr>
<td>ASCUS, cannot rule out high-grade squamous intraepithelial lesion (HSIL)</td>
<td></td>
</tr>
<tr>
<td>Low-grade squamous intraepithelial lesion (LSIL)</td>
<td></td>
</tr>
<tr>
<td>Low-grade lesion encompass the cellular changes associated with HPV cytolologic effect and mild dysplasia (CIN I)</td>
<td></td>
</tr>
<tr>
<td>High-grade squamous intraepithelial lesion (HSIL)</td>
<td></td>
</tr>
<tr>
<td>High-grade lesions encompass moderate dysplasia (CIN II)</td>
<td></td>
</tr>
<tr>
<td>High-grade lesions encompass moderate and severe dysplasia/CIS (CIN III)</td>
<td></td>
</tr>
<tr>
<td>Squamous cell carcinoma</td>
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</tr>
</tbody>
</table>

#### Glandular Cells

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endometrial cells, cytologically benign, in a post-menopausal woman</td>
<td></td>
</tr>
<tr>
<td>Atypical glandular cells of undetermined significance (AGUS):</td>
<td></td>
</tr>
<tr>
<td>Favor endometrial origin</td>
<td></td>
</tr>
<tr>
<td>Favor reactive endocervical cells</td>
<td></td>
</tr>
<tr>
<td>Favor neoplastic endocervical cells</td>
<td></td>
</tr>
<tr>
<td>Not otherwise specified</td>
<td></td>
</tr>
<tr>
<td>Atypical glandular cells present consistent with adenocarcinoma in situ</td>
<td></td>
</tr>
<tr>
<td>Malignant cells consistent w/adenocarcinoma:</td>
<td></td>
</tr>
<tr>
<td>Endocervical adenocarcinoma</td>
<td></td>
</tr>
<tr>
<td>Endometrial adenocarcinoma</td>
<td></td>
</tr>
<tr>
<td>Extrauterine adenocarcinoma</td>
<td></td>
</tr>
<tr>
<td>Other, specify</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3
**Natural History of CIN: A Critical Review**

<table>
<thead>
<tr>
<th>Papers Cited</th>
<th>Subjects</th>
<th>Category</th>
<th>Regress.</th>
<th>Persist.</th>
<th>Prog. CIN III</th>
<th>Prog. Inv.</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>4,504</td>
<td>CIN I</td>
<td>57%</td>
<td>32%</td>
<td>11%</td>
<td>1%</td>
</tr>
<tr>
<td>12</td>
<td>2,247</td>
<td>CIN II</td>
<td>43%</td>
<td>35%</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td>21</td>
<td>767</td>
<td>CIN III</td>
<td>32%</td>
<td>&lt;56%*</td>
<td>-</td>
<td>12%*</td>
</tr>
</tbody>
</table>

CIN = cervical intraepithelial neoplasia

Limit to report of cytology and/or biopsy alone. Exclude cone and destructive treatment.

*Limited follow-up in some series
There is a need for professional education to increase awareness for screening guidelines, screening frequency and managing abnormal smears. Caregivers can expand opportunistic screening by offering Pap smear screening to women presenting with acute or chronic care.

**Proper sampling and handling of smears.** Symptoms, such as abnormal vaginal bleeding or discharge, are symptoms of cervical cancer. Bleeding can be spontaneous, irregular or post-coital. In the presence of either a fungating or ulcerative lesion on the cervix, a biopsy rather than a Pap smear should be taken.

Improper technique in obtaining or preparing the Pap smear accounts for two-thirds of false-negatives. Slides should be labeled with a unique patient identifier to minimize potential mix-ups. A combined technique that samples the ectocervix and endocervix produces a greater probability of sampling the transformation zone. The ectocervix is sampled with a wooden spatula. There is debate about the ideal method of sampling the endocervix. If the endpoint to be achieved is biopsy-proven dysplasia, then there is no difference between the cytobrush and a moistened cotton swab.¹⁸

**High-quality laboratory services.** Although responsible for approximately one-third of false-negative smears, most litigation cases involving women with cervical cancer cite laboratory error. Most jurisdictions have multiple independent cytology laboratories. Having uniform standards, including reporting terminology (Table 2), Pap smear adequacy, quality assurance, rejection policies and demonstrating performance standards that are required in an organized screening program, appears to afford some legal protection in litigation.

New technologies, monolayer cytology and computer-assisted automated recheck may decrease the false-negative fractions, however, cost-effectiveness needs to be demonstrated before they are instituted. There is no clear evidence that these technologies will provide a significant benefit over good laboratory practice. As only a small number of significant lesions are missed, their impact on the prevention of cervical cancer is likely to be small.

**Appropriate evaluation and management.** Any individual with a Pap demonstrating high-grade squamous intraepithelial lesions (HSILs) or carcinoma cells is referred for colposcopy. The management of minor cytology diagnoses-atypical squamous cells of undetermined significance (ASCUS) and low-grade squamous intraepithelial lesions (LSIL)-remains controversial. Some physicians propose a conservative approach by repeat Pap smears, whereas others propose immediate colposcopy. Low-grade smears often are clinically insignificant, but can prompt further procedures, leading to patient anxiety and some physical risk. The natural history of individuals with a histology diagnosis of mild dysplasia frequently is of spontaneous regression (Table 3).

An ongoing randomized trial by the National Cancer Institute involving 7,200 women should yield data on efficacy and cost-effectiveness that may help develop clinical management guidelines. This trial compares three management arms for ASCUS and LSIL: immediate colposcopy, repeat Pap smears and HPV testing.

As cervical cytology programs develop, guidelines (recommendations) for repeat Pap smears and/or colposcopy referrals can be standardized within various jurisdictions. The Manitoba Cervical Cancer Screening Program has developed guidelines for caregivers in Manitoba (Table 4) that are similar to several other jurisdictions in Canada and internationally.

Colposcopy services should be coordinated. Training, reporting and follow-up should be standardized. Each colposcopist should have...
sufficient exposure to clinical material to maintain expertise. A coordinated colposcopy program would facilitate quality control programs with colposcopy, cytology and histology.

**Method to monitor and evaluate.** Programs need to establish short- and long-term goals. This would facilitate policy decisions, assess program effectiveness, review quality and standards of service delivery and permit research.

A decrease in the incidence and mortality from cervical cancer is the obvious long-term goal of an organized screening program. Short-term goals, such as increasing screening in under-screened groups, increasing screening in under-screened regions, demonstrating laboratory quality standards, the establishment of fail-safe mechanisms for women with positive smears and high-quality colposcopy services, would allow programs to evaluate their policies within a relatively short timeframe.

**Quality assurance.** Quality assurance is required for all components of screening and management: Pap-smear-taking technique, laboratory services, colposcopy and treatment.

**Conclusions**

The Pap smear has proven itself as an ideal screening test, despite never having been submitted to the scientific riggers of a randomized control trial. The incidence of and mortality from cervical cancers has decreased with its opportunistic use in Canada. The rate of decline has eased, suggesting that our current opportunistic methods have reached their limitations. Organized population-based systems used in the Scandinavian countries have demonstrated further reductions compared to Canada’s opportunistic system.

Further reduction of the incidence of, and mortality from, cervical cancer can be achieved by increasing the percentage of cervical neoplasm discovered in the precancerous or localized stages. This can be accomplished by screening women at greatest risk for cervical cancer-s specifically those who have not had a Pap smear or those who have not had one for several years. Often, these women may be older, of lower socioeconomic status, living in rural settings, recent immigrants, of Aboriginal decent, minorities or immune-compromised. Special efforts are needed in these groups to develop screening strategies to recruit them. Savings to the health-care system resulting from prevented cases of cervical cancer can be applied to these initiatives. Often, they are seen by physicians for a variety of acute and chronic conditions unrelated to preventative medical care. There are opportunities to educate both health-care providers and their patients about the benefits of screening.
<table>
<thead>
<tr>
<th>BETHESDA</th>
<th>MODIFIED WALTON</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfactory*</td>
<td>Unsatisfactory*</td>
<td>First: Repeat smear Second: Colposcopy</td>
</tr>
<tr>
<td>Satisfactory but limited by:</td>
<td>Negative but limited by:</td>
<td>Repeat in 1 year if asymptomatic and no previous abnormal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Repeat in 6 months if symptomatic and/or previous abnormal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Persistent: Colposcopy</td>
</tr>
<tr>
<td>Within normal limits</td>
<td>No abnormal cells seen</td>
<td>After 3 annual Pap smears reported as within normal limits, screening should be continued every 2 years</td>
</tr>
<tr>
<td>ASCUS: (favouring reactive)</td>
<td></td>
<td>Repeat in 6 months Persistence: Colposcopy</td>
</tr>
<tr>
<td>ASCUS:*** (favouring LSIL)</td>
<td></td>
<td>Repeat in 6 months X 3 Persistence: Colposcopy</td>
</tr>
<tr>
<td>ASCUS: (cannot rule out HSIL)</td>
<td></td>
<td>Colposcopy</td>
</tr>
<tr>
<td>***LSIL</td>
<td>Mild dysplasia</td>
<td>Repeat in 6 months X 3 Persistence: Colposcopy</td>
</tr>
<tr>
<td>HSIL</td>
<td>Moderate dysplasia</td>
<td>Colposcopy</td>
</tr>
<tr>
<td>Squamous carcinoma</td>
<td>Consistent with squamous carcinoma</td>
<td>Colposcopy</td>
</tr>
<tr>
<td>AGUS: (favor reactive endocervical cells)</td>
<td></td>
<td>First: Repeat in 6 months Second: Colposcopy, endocervical curettage (ECC), endometrial biopsy</td>
</tr>
<tr>
<td>AGUS: (favor endometrial cells)</td>
<td></td>
<td>Colposcopy, ECC, endometrial biopsy</td>
</tr>
<tr>
<td>AGUS: (favor neoplastic endocervical cells)</td>
<td></td>
<td>Colposcopy, ECC, endometrial biopsy</td>
</tr>
<tr>
<td>Consistent with adenocarcinoma in situ</td>
<td>Atypical glandular cells present consistent with adenocarcinoma in situ</td>
<td>Colposcopy</td>
</tr>
<tr>
<td>Malignant cells consistent with adenocarcinoma</td>
<td></td>
<td>Requires further investigation</td>
</tr>
</tbody>
</table>
Table 4 (cont’d)
Recommendations for Repeat Smears and Colposcopy Referrals

Note: Any visual abnormalities of the cervix and/or abnormal bleeding should be investigated by colposcopy and/or biopsy, regardless of the findings on cytology.

*Please inform your patient that this repeat is not due to abnormal findings.
**ASCUS favoring LSIL, LSIL: Repeat Pap in six months. If three subsequent smears are normal, the patient can return to recommended smear intervals.

^Immediate referral to colposcopy may be appropriate if the patient is unreliable or is anxious.

Diethylstilbesterol (DES) exposure should be referred for colposcopy. Colposcopy serves an ancillary role in lower genital tract cancer screening programs.

The Pap smear is a screening test and, hence, has false-negatives and false-positives. Quality assurance ensures sensitivity and specificity. Newer technology-automated screening devices, monolayer cytology and HPV sub-typing can reduce false-negative rates. The overall impact probably is minimal with high-quality laboratory services. However, cost-effective assessment needs to be done before being accepted for routine screening. The relatively low cost of the Pap smear permits screening more of the population.

Reducing the rate of HPV infection by encouraging changes in the sexual behavior of young people and/or through developing an effective HPV vaccine also could reduce the risk.

The 1976 and 1982 Walton Reports and the 1989 Report of a National Workshop on Screening for Cancer of the Cervix define an organized system that would improve screening for cervical cancer. An organized system would facilitate the recruitment/retention of under-served women, education and guidelines for women and caregivers, high-quality laboratory and colposcopy services, as well as quality assurance.

References

What is Cervical Cancer?
Cervical cancer is a malignancy of the cells lining the surface of the cervix. It affects women of all ages. If caught early, complete cure is the rule and, especially in the pre-cancerous stage, it can be prevented.

What Causes Cervical Cancer?
The specific cause of cervical dysplasia or cervical cancer is unknown. Research has shown that the human papillomavirus (HPV) plays an important role in the development of cervical cancer. There are over 100 subtypes of HPV, but only a few are linked to cervical dysplasia or cervical cancer. Many women with cervical cancer or pre-cancerous conditions have HPV in their cervical cells. HPV is very common, and only a very small percentage of women with HPV will develop cervical dysplasia or cervical cancer. However, there is a difference between association and causation.

What is a Pap Smear?
How is it Obtained?
The Pap smear is obtained at a gynecologic examination. The Pap smear is a safe, non-invasive, cost-effective medical procedure. If the cervix appears normal, a Pap smear is obtained. It consists of cells removed from the cervix, which are specially prepared for microscopic examination. Most cervical cancers occur at the junction (transformation zone) where the two different cell types (Squamous and glandular cells) meet. The cells are removed by a combination of devices that ensure a sampling of a large area from the cervix.

The removed cells are evenly spread onto a glass slide.

Each slide typically contains hundreds of thousands of cells. Pap smears are sent to an accredited laboratory to be stained, examined under the microscope and interpreted. With proper collection, processing and evaluation, the Pap smear may detect cervical cancer, pre-cancerous lesions and a variety of infectious conditions.

How Accurate is a Pap Smear?
The Pap smear is an excellent screening test. However, it is not perfect. The best way to protect yourself against false-negative results is to have regular gynecologic examinations with a Pap smear. With regular, repeat testing, the chance that a significant abnormality will be missed becomes infrequent.

What Do the Results Mean?
A smear reported as “within normal limits” means there are no detectable abnormalities. A smear that is “unsatisfactory” does not mean that there is a problem. It reflects that either there are too few cells on the slide or that there are inflammatory cells (infection) or blood (menstruation) obscuring the slide.

An “abnormal” result means you and your physician must discuss some follow-up treatment. The cells may be changed in reaction to an infection or similar type of injury. These reactive changes are temporary and benign—they do not indicate cancer. On occasion the cervical cells may exhibit changes that could become Squamous cell cancer. Such changes are reported as dysplasias or squamous intraepithelial lesions and are pre-cancerous conditions. The recommended follow-up will probably be another Pap smear or a colposcopy. Follow-up on all abnormal findings and compliance with expert advice are critical.
How Can I Assure the Most Accurate Pap Smear Result Possible?

1. Schedule your gynecologic examination at the optimum time – two weeks after the first day of your last menstrual period. The blood and debris of menstrual flow may hide abnormal cells.

2. Do not use vaginal medications, creams, contraceptives or douches for 48 hours prior to the examination.

3. Abstain from intercourse for 24 hours prior to the examination.

4. Provide your health-care provider with pertinent information, such as your age, if a change in your name has occurred since your last office visit, the dates of your last menstrual period, any medication including hormones, prior surgical procedures and history of a prior abnormal Pap smear, as well as symptoms, such as bleeding after intercourse or post-menopausal bleeding, discharge, itching or pain.

5. Make sure your physician obtains a combined smear, and that your Pap smear is sent to an accredited laboratory.

6. Call your doctor to get your test results and schedule any follow-up necessary.

Fortunately, cervical cancer usually develops slowly over many years. One of your best means for preventing cervical cancer is to have a yearly gynecologic examination with a Pap smear.

Remember: The best way to prevent cervical cancer is regular gynecologic examinations and Pap smears.

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Other Instructions

Prepared by Dr. Robert Lotocki, Associate Professor Gynecological Oncology, University of Manitoba, Head, Gynecology, St. Boniface General Hospital and Medical Director, Manitoba Cervical Cancer Screening Program, Winnipeg, Manitoba

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