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ONE MINUTE CONSULT

BRIEF ANSWERS TO SPECIFIC CLINICAL QUESTIONS

Is Pap testing still needed after hysterectomy?

A 50-year-old woman presents for a new patient visit. She underwent vaginal hysterectomy for menorrhagia 4 years ago, with removal of the uterus and cervix. Tissue studies at that time were negative for dysplasia. Her previous physician performed routine Papanicolaou (Pap) tests, and she asks you to continue this screening. How do you counsel her about Pap testing after hysterectomy for benign disease?

Despite recommendations against screening, many providers continue this non-evidence-based practice

SCREENING GUIDELINES

Introduced in 1941, the Pap test is an example of a successful screening tool, improving detection of early cervical cancer and reducing rates of morbidity and death due to cervical cancer. Early stages of cervical cancer are the most curable.[1]

Screening in women who have a cervix

In 2012, the US Preventive Services Task Force (USPSTF) updated its 2003 recommendations for cervical cancer screening.[1] In the same year, the American Cancer Society, the American Society for Colposcopy and Cervical Pathology, and the American Society for Clinical Pathology published a consensus guideline.[2] This was followed by publication of a guideline from the American College of Obstetricians and Gynecologists.[3] These guidelines all recommend Pap testing for cervical cancer every 3 years in women ages 21 to 65. In women ages 30 to 65, the screening interval can be lengthened to every 5 years if the patient undergoes cotesting for human papillomavirus (HPV). These recommendations apply only to women with a cervix.

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No screening after hysterectomy for benign indications

Women who undergo hysterectomy with complete removal of the cervix for benign indications, ie, for reasons other than malignancy, are no longer at risk of cervical cancer. Pap testing could still detect vaginal cancer, but vaginal cancer is rare and screening for it is not indicated. The USPSTF 2003 and 2012 guidelines recommend not performing Pap testing in women who had had a hysterectomy for benign indications.[1]

Vaginal cancer is rare

Although cervical and vaginal cancers share risk factors, vaginal cancer accounts for only 0.3% of all invasive cancers and 1% to 2% of all gynecologic malignancies in the United States.[4]

A review of 39 population-based cancer registries from 1998 to 2003 found the incidence rate for in situ vaginal cancer to be 0.18 per 100,000 women, and the incidence rate for invasive vaginal cancer was 0.69 per 100,000. Rates were higher in older women and in certain ethnic and racial groups, including black and Hispanic women.[4]

When the cervix is removed during hysterectomy for a benign indication, the patient's risk of vaginal cancer or its precursors is extremely low. Pearce et al[5] reviewed Pap tests obtained from the vaginal cuff in 6,265 women who had undergone hysterectomy for benign disease. Their 2-year study reviewed 9,610 vaginal Pap tests, and in only 5 women was vaginal intraepithelial neoplasia type I or II found, and none of the 5 had biopsy-proven vaginal cancer. Only 1.1% of all Pap tests were abnormal. The authors concluded that the

positive predictive value for detecting vaginal cancer was 0%.[5]

A retrospective study by Piscitelli et al[6] in 1995 looked back 10 years and found an extremely low incidence of vaginal dysplasia in women who had undergone hysterectomy for a benign indication. Their findings, coupled with the high rate of false-positive tests, do not support cytologic screening of the vagina after hysterectomy for a benign indication. The data also suggested that 633 tests would need to be performed to diagnose 1 case of vaginal dysplasia.[6] Other studies have also reported a low yield of vaginal cuff cytologic testing after hysterectomy for benign disease.

Therefore, given the low prevalence of disease and the lack of evidence of benefit of screening after hysterectomy for benign indications, Pap testing of the vaginal cuff is not recommended in these patients.[7]

Screening for women at high risk after hysterectomy

For women with a history of grade 2 or 3 cervical intraepithelial neoplasia who have undergone hysterectomy, there are only limited data on subsequent disease risk.

Wiener et al[8] followed 193 post-hysterectomy patients who had a history of cervical intraepithelial neoplasia with Pap testing annually for more than 10 years for a total of 2,800 years of follow-up. The estimated incidence of abnormal cytology (0.7/1,000) was higher than in the general population.[8]

Thus, for these women and for others at high risk who have undergone hysterectomy and have a previous diagnosis of cervical cancer, who had been exposed to diethylstilbestrol, or who are immunocompromised, Pap testing to screen for cancer in the vaginal cuff is recommended, as they are at higher risk of dysplasia at the vaginal cuff.[2]

PRACTICE TRENDS, AREAS FOR IMPROVEMENT

Despite recommendations against screening, many providers continue this non-evidence-based practice.[4]

The 2000–2013 National Health Interview Survey of women age 20 or older who had undergone hysterectomy asked about their most recent Pap test by self-report. Women were excluded if they had a history of cervical cancer, if they had had a Pap test for another health problem, or if the result of the recent Pap test was not known. In 2000, nearly half (49.1%) of the respondents said they had received a Pap test in the previous year; in 2013, the percentage undergoing testing was down to 32.1%, but testing was unnecessary in 22.1%. Screening was largely due to clinician recommendations, but it was initiated by patients without clinician recommendations in about one-fourth of cases.[9] Lack of knowledge of the revised 2012 guidelines was cited as the primary reason for unnecessary screening.[10]

A study of provider attitudes toward the cancer screening guidelines cited several reasons for nonadherence: patient concern about the guidelines; quality metrics that are incongruent with the guidelines; provider disagreement with the guidelines; risk of malpractice litigation; and lack of time to discuss the guidelines with patients.[11]

As the healthcare landscape changes to team-based care, the clinician and the entire healthcare team should educate patients about the role of vaginal cancer screening after hysterectomy for benign reasons. Given the limited time clinicians have with patients during an office visit, innovative tools and systems outside the office are needed to educate patients about the risks and benefits of screening.[11] And notices in the electronic medical record may help busy clinicians keep up with current guidelines.[10]

THE CLINICAL BOTTOM LINE

Pap testing to screen for vaginal cancer in women who have undergone hysterectomy for a benign indication is an example of more testing, not better care. Evidence is lacking to justify this test in women who are not at high risk of cervical cancer. To reduce the overuse of cytology screening tests, providers need to stay informed about evidence-based best practices and and to pass this information along to patients.

We should focus our resources on HPV vaccination and outreach to increase screening efforts in geographic areas with low rates of Pap testing rather than provide unnecessary Pap testing for women who have undergone hysterectomy for a benign indication. ■

The focus of resources should be on HPV vaccination and on outreach to increase Pap testing where rates of testing are low

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