Since its widespread implementation more than 4 decades ago, cervical cancer screening has dramatically reduced the incidence of and mortality from invasive cervical cancer. However, in 2002, the time-honored practice of annual Papanicolaou (Pap) screening was altered with the addition of human papilloma virus (HPV) testing to screening, as well as longer screening intervals.\textsuperscript{1} After several iterations, the 2012 consensus guidelines as supported by the American College of Obstetricians and Gynecologists, the American Cancer Society, and the US Preventive Services Task Force currently provide a road map for screening and management of abnormalities.\textsuperscript{2,3}

**Review of guidelines for women aged older than 65 years.** The 2012 consensus guidelines were compiled using literature review, observational data from the Kaiser Permanente Northern California, and expert panel recommendations from the American Society for Colposcopy and Cervical Pathology. Cessation of cervical cytology screening for women aged older than 65 years should occur if the following criteria are met: 1) adequate negative screening, defined as three consecutive negative cytology results or two negative cotests (cytology plus HPV assessment) within the 10 years preceding screening exit, with the most recent test occurring within the past 5 years, and 2) women in this category should not have had cervical intraepithelial neoplasia (CIN) 2 or worse (CIN 2+) disease in the prior 20 years before exiting screening.

Women with known CIN 2+ disease should continue with screening for at least 20 years after treatment, which in many cases may extend past the age of 65. Additionally, women aged older than 65 years should not reenter screening, even in the event of a new sexual partner.

The above recommendations acknowledge that more than half of cervical cancer diagnoses are made in women who are not screened or are underscreened.\textsuperscript{4} Modeling studies suggest that continued screening beyond age 65 to age 90 in otherwise low-risk women would prevent only 1.6 per 1,000 cancer cases and 0.5 per 1,000 cancer deaths.\textsuperscript{5} However, continued screening
would result in an additional 127 colposcopies per 1,000 women while extending life expectancy by less than one day per woman. Even in the event of an incident HPV infection with a new partner, most women are likely to have similar rates of viral regression as younger cohorts do. Older women have a smaller transformation zone, with less susceptibility to HPV infection. In addition, cervical cancer disease progression can be as long as 20 to 25 years. By taking these factors into account, the 2012 guidelines conclude that screening in low-risk, older women may yield rare cases of CIN 2+ and likely even fewer cancers.

Navigating the changes. Despite the above guidelines, many clinicians are continuing to perform cervical cancer screening in patients aged older than 65 years. The “annual Pap” has become such a mainstay in women’s health lexicon that it has been challenging to accept screening less often than every year or cessation of screening altogether. Many of our patients confuse “Pap” with pelvic examinations and benefit from counseling regarding these terms and services. Notwithstanding that there is little benefit, patients have come to expect routine Pap screening as standard of care, even enduring downstream procedures such as colposcopy with cervical biopsies. Many providers continue to support annual cervical cancer screening and regard the 2012 guidelines as clinically inappropriate, whereas others cite a general lack of knowledge as a barrier to adherence.

Clinicians who are leaning toward continuing to screen for cervical cancer beyond the age of 65 years should recognize that such screening entails its own risks. Older women have a higher false-positive rate of cervical cytology screening, commonly attributable to atrophic, inflammatory changes. Consequently, this higher false-positive rate results in more invasive procedures, including excisional procedures, with little benefit of diagnosing precancerous lesions or cancer. The physical discomfort endured by the additional testing, as well as the emotional stressors associated with an abnormal Pap result, are not trivial nor are the logistic challenges and costs associated with extra office visits.

Some may argue that despite the inconveniences of screening and low yield in finding cancer cases, it is still worthwhile. In fact, studies published since the 2012 consensus guidelines have demonstrated some benefit of screening beyond age 65 years, notably a 77% reduction in an already-low incidence of cervical cancer diagnoses. With the introduction of longer screening intervals in the 2012 guidelines, Kinney and associates have demonstrated that even a compliant patient has a two-fold increased risk of developing cervical cancer in her lifetime, with screening based on cotesting every 5 years. However, despite those findings, allocating already-limited healthcare resources to prevent rare cases of invasive cervical cancer is cost prohibitive.

Although cases of cervical cancer may occur in women aged older than 65 years, the absolute numbers are low, and screening to capture these rare events at present would have a low public health impact. Accordingly, in our practice, we explain to our patients as they approach age 65 why we do not recommend or perform ongoing cervical cancer screening. An open discussion with patients generally leads to acceptance of the data and reassurance that only in very rare circumstances will cancer be missed.

References

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This Practice Pearl, developed by the authors, provides practical information on current controversial topics of clinical interest. It is not an official position of The North American Menopause Society (NAMS). Clinicians must always take into consideration the individual patient along with any new data published since the publication of this statement. The Practice Pearl series is coordinated by the NAMS Practice Pearl Task Force, edited by Dr. Andrew Kaunitz, and approved by the NAMS Board of Trustees.