

UCSF

UC San Francisco Previously Published Works

Title

Screening Pelvic Examinations: The Emperor's New Clothes, Now in 3 Sizes?

Permalink

<https://escholarship.org/uc/item/7bw8c93m>

Journal

JAMA Internal Medicine, 177(4)

ISSN

2168-6106

Author

Sawaya, George F

Publication Date

2017-04-01

DOI

10.1001/jamainternmed.2017.0271

Peer reviewed

Screening Pelvic Examinations

The Emperor's New Clothes, Now in 3 Sizes?

George F. Sawaya, MD

The US Preventive Services Task Force (USPSTF) has finalized its recommendation statement¹ regarding periodic screening with the pelvic examination, and it is both unusual and remarkable. It is unusual because the USPSTF typically does not make recommendations about a test separate from a specific health condition. It is remarkable in that it finds the evidence insufficient to assess



Related articles at jama.com

the balance of benefits and harms of performing screening pelvic examinations in asymptomatic women—a conclusion in direct contrast to that of 2 other high-profile professional societies: the American College of Physicians (ACP) and the American Congress of Obstetricians and Gynecologists (ACOG).

Evidently, both the ACP and the ACOG believe the evidence to be sufficient to make a recommendation, but in different directions. The ACP strongly recommends against performing the examination in asymptomatic, nonpregnant adult women.² This conclusion was based on a systematic review that found no evidence in support of the examination but found evidence of harms ranging from psychological distress to unnecessary surgery.³ The ACOG, on the other hand, acknowledges the lack of evidence but recommends annual examinations in women 21 years or older “based on expert opinion.”^{4(p422)} The ACOG’s Well Woman Task Force reinforces the recommendation and the belief that the decision to perform the examination be a shared one between a woman and her clinician.⁵ In effect, we now have 3 influential groups making 3 different recommendations.

It is important to note that the USPSTF recommendation statement¹ does not apply to health conditions for which the USPSTF already recommends screening, such as cervical cancer, gonorrhea, or chlamydia in some women. Specifically, the USPSTF addresses the stand-alone value of the routine pelvic examination (which may include any of the following components, alone or in combination: assessment of the external genitalia, internal speculum examination, bimanual palpation, and recto-vaginal examination) outside of any other indications.

All 3 groups agree on 1 fact: there is a substantial lack of evidence of benefit of the examination in this context, including its value in screening for ovarian cancer. How can it be that such a long-standing practice has escaped the usual high standards of evidence required of preventive interventions? Has the emperor been traipsing around unclothed for as long as anyone can remember?

Perhaps it is the attention to harms that have caused a closer look. The new USPSTF statement¹ puts these harms in sharper focus. In a commissioned evidence report,⁶ ovarian

palpation (a major goal of the bimanual examination) in the setting of ovarian cancer screening was found to yield false-positive rates ranging from 1.2% to 8.6%. In the studies reviewed, about 5% to 36% of women with abnormal findings on examination ended up having surgery. These observations were made largely among postmenopausal women; abnormal findings on bimanual examination are likely more prevalent among premenopausal women with dynamic ovaries.

In the clinical experiences of gynecologists, we have all seen it: the adnexal “fullness” on bimanual examination, the ultrasonogram showing a mass (and the ubiquitous statement about the inability to rule out cancer), the repeat ultrasonogram showing the same, the fear and anxiety, the preoperative appointment, the surgery, the recovery, the wait for final pathology. The disclosure: “It’s not cancer.” Then, the bill arrives.

The physical, psychological, and financial burdens of this sequence of events have not been well described, but like many iatrogenic harms, they lie in a murky, unseen background of low-value care. A back-of-the-envelope analysis suggests that the population harms incurred may be substantial. Over 62 million pelvic examinations were performed in 2010,⁷ and given the ACOG’s recommendation, it can be assumed that many were performed in asymptomatic women. A 2010 survey of US obstetrician-gynecologists indicated that they performed routine examinations of over 85% of women across the patient’s lifespan and even bimanual examination among those women who had undergone total hysterectomy with removal of both tubes and ovaries,⁸ indicating that the examination may be more of a ritual than an effective preventive intervention.⁹

Many women are also unsure about the purpose of the screening pelvic examination. In a recent study of women recruited from women’s clinics, about half did not know the examination’s purpose.¹⁰ Those who claimed to know believed it to be useful mainly in reassurance of normalcy. But is this need for reassurance simply a consequence of decades-long public health messaging about the need for an annual examination? Should we continue to consider the female pelvis a ticking time bomb that can only be defused by a clinician at an annual visit? How much does such an attitude erode wellness?

More importantly, what should clinicians do? The USPSTF believes that in the setting of an “I” statement, clinicians should be forthright with patients about the uncertainty concerning the balance of benefits and harms. Like the ACOG, the USPSTF suggests shared decision making regarding routine pelvic examination. But perhaps the conversation should focus

on the uncertainty among the 3 professional groups. Women should know the facts: that all 3 groups agree there is no scientific evidence that these examinations are beneficial; that there is evidence of harms including “false alarms,” further testing, and even unnecessary surgery; and that 1 group strongly recommends against screening examinations, believing them to be more harmful than beneficial. Of course, clinicians should make it clear that women should have a diagnostic pelvic examination if they experience a problem (eg, pelvic pain, abnormal vaginal bleeding) or have a concern.

Framing this as a choice in the context of uncertainty provides a way for devotees of USPSTF recommendations to no longer perform the examination routinely and for some women to opt out of a procedure that they may find painful and anxiety provoking.³ It may be difficult for patients to understand the reasoning behind an abrupt change in a long-standing practice, but as with many medical interventions, recommendations live within a framework of shifting evidence and perspectives. Women should be aware that practice changes often

reflect an improved understanding of how well-intentioned interventions might do more harm than good.

The USPSTF statement of insufficient evidence¹ holds the promise that evidence will eventually emerge and tip the recommendation toward either benefit (an A, B, or C recommendation) or harm (a D recommendation), but the path forward looks long, upward, and steep. While the USPSTF recommendation statement focuses on how little is known about the examination’s efficacy for 4 conditions, it does not name any specific diseases for which the examination might be useful, making it difficult to engineer bridges to close the evidence gaps.

There is another possible path forward: a long downward spiral. Those outside the debate might consider the evidence and see only an invasive procedure with clear evidence of harms, no evidence of benefits, and no clues as to what the benefits might even be. Perhaps women, once they are told the underpinnings of this controversy, will be the best judges of whether they see the emperor’s new clothes—or the naked truth.

ARTICLE INFORMATION

Author Affiliations: UCSF Center for Healthcare Value, San Francisco, California; Department of Obstetrics, Gynecology, and Reproductive Sciences, University of California, San Francisco; Department of Epidemiology and Biostatistics, University of California, San Francisco.

Corresponding Author: George F. Sawaya, MD, Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco, 550 16th St, 7th Floor, San Francisco, CA 94143 (George.sawaya@ucsf.edu).

Published Online: March 7, 2017.
doi:10.1001/jamainternmed.2017.0271

Conflict of Interest Disclosures: None reported.

REFERENCES

1. US Preventive Services Task Force. Screening for gynecologic conditions with pelvic examination: US Preventive Services Task Force recommendation statement [published March 7, 2017]. *JAMA*. doi:10.1001/jama.2017.0807
2. Qaseem A, Humphrey LL, Harris R, Starkey M, Denberg TD; Clinical Guidelines Committee of the American College of Physicians. Screening pelvic examination in adult women: a clinical practice guideline from the American College of Physicians. *Ann Intern Med*. 2014;161(1):67-72.
3. Bloomfield HE, Olson A, Greer N, et al. Screening pelvic examinations in asymptomatic, average-risk adult women: an evidence report for a clinical practice guideline from the American College of Physicians. *Ann Intern Med*. 2014;161(1):46-53.
4. Committee on Gynecologic Practice. Committee opinion No. 534: well-woman visit. *Obstet Gynecol*. 2012;120(2 pt 1):421-424.
5. Conry JA, Brown H. Well-Woman Task Force: components of the well-woman visit. *Obstet Gynecol*. 2015;126(4):697-701.
6. Guirgis-Blake JM, Henderson JT, Perdue LA. Periodic screening pelvic examination: evidence report and systematic review for the US Preventive Services Task Force [published March 7, 2017]. *JAMA*. doi:10.1001/jama.2016.12819
7. National Center for Health Statistics, Centers for Disease Control and Prevention. National Ambulatory Medical Care Survey: 2012 State and National Summary Tables. https://www.cdc.gov/nchs/data/ahcd/namcs_summary/2012_namcs_web_tables.pdf. Accessed January 17, 2017.
8. Henderson JT, Harper CC, Gutin S, Saraiya M, Chapman J, Sawaya GF. Routine bimanual pelvic examinations: practices and beliefs of US obstetrician-gynecologists. *Am J Obstet Gynecol*. 2013;208(2):109.e1-109.e7.
9. Sawaya GF, Jacoby V. Screening pelvic examinations: right, wrong, or rite? *Ann Intern Med*. 2014;161(1):78-79.
10. Norrell LL, Kuppermann M, Moghadassi MN, Sawaya GF. Women’s beliefs about the purpose and value of routine pelvic examinations. *Am J Obstet Gynecol*. 2016;S0002-9378(16)46290-3. doi:10.1016/j.ajog.2016.12.031