Beth Israel Deaconess Medical Center

A teaching hospital of Harvard Medical School

Routine Pelvic Examination

An Evidence-based Appraisal

Hope Ricciotti, MD
Chair
Department of Obstetrics & Gynecology
Beth Israel Deaconess Medical Center
Harvard Medical School
Boston, MA

Disclosures

- Editor in Chief *Harvard Women's Health Watch*
- Editor *Scientific American OBGYN On-line, OBGYN Residency Curriculum, Wellness Toolkit*
- Medical Advisor *Connexus* Reproductive Health app

At the end of this presentation the learner will be able to:

- Evaluate ACOG guidelines on screening pelvic examinations in asymptomatic patients
- Evaluate American College of Physician Guidelines
- Apply evidence based medicine and shared decision making in incorporating pelvic examination to improve health

Our Patient

- Ms C is a healthy 41 year old woman who came in for a wellness visit.
- She has had annual mammograms and cytology/HPV co-tests performed every 5 years. Last was 2 years ago and normal.

History

- OBGYN history
  - 2 term normal vaginal deliveries
- Medical Surgical History
  - Migraine headaches
  - Knee surgery

Social History

- Lives with son
- Works as an administrator
- Exercises regularly
- No tobacco
- Rare alcohol

Family History

- No history of breast, cervical, ovarian or colon cancer

Medications

- Norethindrone 0.35mg once daily
- Ibuprofen 800mg as needed for pain

Physical Examination

- Well appearing
- BP 124/81

Would you do a pelvic examination?

- Speculum examination
- Bimanual examination
- Both speculum and bimanual examination

Background

- Historically, pelvic exam conducted with cervical cancer screening
- Now cancer screening only every 3-5 years
- Many women/providers believe routine pelvic exam should be a part of well woman visit
- Performing routine pelvic exam adds costs to system

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

COMMITTEE OPINION

Number 534, August 2012 (Reaffirmed 2016)

Committee on Gynecologic Practice

This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.

PDF Format

Well-Woman Visit

Abstract: The annual health assessment ("annual examination") is a fundamental part of medical care and is valuable in promoting prevention practices, recognizing risk factors for disease, identifying medical problems, and establishing the clinician–patient relationship. The annual health assessment should include screening, evaluation and counseling, and immunizations based on age and risk factors. The interval for specific individual services and the scope of services provided may vary in different ambulatory care settings. The performance of a physical examination is a key part of an annual health assessment visit, and the components of that examination may vary depending on the patient's age, risk factors, and physician preference. The American College of Obstetricians and Gynecologists explains the need for annual assessments and provides guidelines regarding some important elements of the annual examination; specifically, when to perform pelvic examinations in asymptomatic women, including when to start internal pelvic and speculum examinations, and when to initiate formal clinical breast examinations.

ACOG Guidelines 2012 Committee Opinion (reaffirmed 2016)

- Recommends annual pelvic exam on all women > 21 years
  - Based on expert opinion
  - Limitations should be recognized
  - Better at evaluating uterus than detecting adnexal masses

ACOG Guidelines 2012 Committee Opinion

- Only when indicated by medical history for <21 years
- Discontinued when a woman's age or health would lead her to refuse medical intervention for conditions detected
- Not necessary for STI screening or prior to starting oral contraceptives

ACOG

- Don’t do if asymptomatic and had TAH-BSO for benign indications
- Stop perform pelvic examinations when age or health issues reach point where would choose not to intervene

ACOG

- Annual visit provides opportunity to:
  - Promote prevention
  - Recognize risk factors for disease
  - Identify medical conditions
  - Establish clinician-patient relationship
- Annual visit should include:
  - Screening, evaluation, counseling and immunizations
  - Physical examination- components vary depending on age, risks and physician preferences

American College Physicians (ACP) 2014 and U.S. Preventative Task Force

- Recommends against routine pelvic examination in asymptomatic adult women
- Harms outweigh any benefit
- Does not reduce morbidity or mortality in asymptomatic adult women

Well Woman Task Force (ACOG)

- Took a middle ground between these groups
- Emphasizes shared, informed decision between patient and provider

ACP Guideline

- Based upon article written by Bloomfield and a systematic evidence review sponsored by the Minneapolis Department of Veterans Affairs Health Care System's Evidence-based Synthesis Program Center

Addressed 3 key questions:

- How accurate is pelvic examination for detection of disease?
- What are benefits (reduced mortality and morbidity rates)?
- What are harms (over-diagnosis, over-treatment or diagnostic procedure related)?

Diagnostic accuracy of pelvic exam

- Low for detecting ovarian cancer, rarely detects (noncervical) cancer and not associated with improved health outcomes
- No studies address diagnostic accuracy of the pelvic examination for PID or benign conditions

Harms of pelvic examination

- Many false positive findings, with attendant psychological and physical harms, including unnecessary surgery
- Fear, anxiety, embarrassment, pain and discomfort (worse for women with history of sexual violence)

Pelvic exam not necessary:

- To screen for sexually transmitted infections (STIs) - urine or vaginal samples using nucleic acid amplification do not require pelvic exam
- Before initiating contraception in healthy, asymptomatic individuals; does not help identify contraindications

Patient-centered approach

- Allow patient to be final arbiter of what tradeoffs willing to make to decrease risk of developing a condition
- Gone are days when physicians are final arbiter of what tradeoffs patients are willing to make to decrease their risk of developing a condition

Diagnostic Accuracy is Low

Outcome	Sensitivity	Specificity	Positive Predictive Value (PPV)*
Adnexal Mass ≥ 5 cm	28%	93%	64%
Abnormal Uterine Size	64%	80%	57%
Abnormal Uterine Contour	62%	78%	55%

Int J Gynecol Obstet 2005;88:84-88

Pelvic examination and ovarian cancer

Prospective Cohort Study (Year)	Study Population	Abnormal or Ambiguous pelvic exam	1 Year Incidence Ovarian Cancer	Positive Predictive Value (PPV)
Jacobs et al. (1988)	N=1010 Mean age 54	28 (2.7%)	1/1010	3.6%
Grover et al. (1995)	N=2623 Mean age 51	40 (1.5%)	1/2623	0%
Adonakis et al. (1996)	N=2000 Mean age 58	174 (8.7%)	2/2000	1.2%

Lancet 1988;1: 268-71.
Med J Australia 1995; 162: 148-410.
Eur J Obstet Gynecol and Repro Biol 1996;65: 221-5

Pelvic exam and patient compliance

- Women reporting pelvic exam-related pain less likely to follow-up
- Increased utilization hormonal contraceptives when uncoupled from pelvic exam
- Patient preference for (and better performance of) self-collected vaginal swabs for STI screening

Low quality practices

- 2010 survey US physicians and APRNs **1/3 still require pelvic exam prior to provision of OCs**
- 2009 survey of US physicians **30-95% routinely performed pelvic exams to screen for ovarian cancer**, 41-96% to screen for other GYN cancers, and 40-92% to screen for STIs

Evidence-based practices

- In 2012, **HPV vaccine uptake** among US women aged 19-26 was 34.5%
- In 2001, 7% of women aged ≥ 18 reported ever being asked about **domestic violence**
- Between 1999-2010 **chlamydia screening** was 40-60%.
- In 2009, women using **long-acting reversible contraception** (LARC) was 8.5%

Spend time counseling

- Only **40% of US OBGYNs routinely ask about sexual function**
- Only **38% of women with urinary incontinence are asked about symptoms**
- **Patient-reported family histories of ovarian and uterine cancer often unreliable**

J Sex Med 2013;10: 2658-2670
J Obstet Gynaecol 2006;26: 442-4.
JAMA 2004;292: 1480-1489.

What to say/do with our patient

- ✓ **Elicit symptoms** (take thorough sexual and urological history) and **respond to concerns**;
- ✓ **Identify risk factors** (update family history);
- ✓ **Screen for domestic violence**;
- ✓ **Screen for STIs** (if at-risk; patient-collected vaginal swab);
- ✓ **Discuss 'alarm' symptoms** (e.g., abnormal bleeding);
- ✓ **Provide counseling re: highly effective contraception, healthy lifestyle behaviors**;
- ✓ **Offer same-day access to LARC insertion** (if desired).

- An 18 year-old presents for contraceptive counseling and sexually transmitted infection screening.
  - She recently began to have sexual intercourse with her boyfriend.
  - She uses condoms.
  - She is asymptomatic.
  - She would like to be started on oral contraceptive pills

Would you do a pelvic examination?

- Guidelines from all major groups, including ACOG, do not include pelvic examination for women under 21, unless indicated by medical history.
- Urine or vaginal swabs can be used to test for sexually transmitted infections and do not require a pelvic examination.
- Hormonal contraception can be initiated in healthy, asymptomatic women without a pelvic examination.

- A 25-year-old G1P1 presents for a well woman visit. She is asymptomatic. Her last well woman visit was one year ago.

Would you do a pelvic examination?

- ACOG - recommends pelvic examination on an annual basis in all patients > 21 years
- WWTF – a shared decision after a discussion between patient and health care provider
- American College of Physicians - recommends against screening for pathology using pelvic examination in asymptomatic, non-pregnant, adult women.

- A 55-year-old post-menopausal woman presents for periodic screening examination.
- She is asymptomatic.
- She is overweight, has type II diabetes.
- Her last pelvic examination was 5 years ago when she had cervical cancer screening done.
- She wonders if she needs a bimanual examination at the time of her cytology and HPV specimen collection today.

Would you do a pelvic examination?

- Cervical cancer screening - cytology plus HPV co-testing.
- ACOG guidelines recommend that a pelvic examination be performed on an annual basis in all patients aged 21 years and older
- WWTF - shared decision after a discussion between the patient and her health care provider.
- ACP - recommends against screening for pathology using pelvic examination

- A 60-year-old presents for annual well woman visit after recently moving to the area. She is asymptomatic. She is not sexually active, and finds pelvic examinations uncomfortable.
- She brings all of her prior medical records.
- She had a total abdominal hysterectomy for painful fibroids 10 years ago.
- She has never had an abnormal cervical cancer screening test, and her gynecologist stopped doing them after her hysterectomy.

Would you do a pelvic examination?

- ACOG and the WWTF recommend that the decision to receive an internal examination be left to the patient if she is asymptomatic and has undergone a total hysterectomy and bilateral salpingo-oophorectomy for benign indications

- An 80-year-old woman is in poor health from complications of cardiac disease. She and her primary care physician have made a decision to discontinue mammograms.

Would you do a pelvic examination?

- It is reasonable to stop performing pelvic examinations when:
  - Age or other health issues reach a point where woman would not choose to intervene on conditions detected during routine examination
  - Particularly if she is discontinuing her other routine health maintenance assessments

What will impact on training be if physicians stop routinely performing pelvic examinations?