

CADTH Reference List

Routine Pelvic Examination for the Detection of Malignant or Benign Gynecological Conditions

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Key Messages

- One systematic review with meta-analysis and 1 non-randomized study were identified regarding the clinical utility of routine pelvic examination for the detection of gynecological malignancy, pelvic inflammatory disease, or other benign gynecological conditions.
- One systematic review with meta-analysis and 1 non-randomized study were identified regarding the safety of routine pelvic examination for the detection of gynecological malignancy, pelvic inflammatory disease, or other benign gynecological conditions.

Research Questions

1. What is the clinical utility of routine pelvic examination for the detection of gynecological malignancy, pelvic inflammatory disease, or other benign gynecological conditions?
2. What is the clinical evidence regarding the safety of routine pelvic examination for the detection of gynecological malignancy, pelvic inflammatory disease, or other benign gynecological conditions?

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, the Cochrane Database of Systematic Reviews, the international HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concept was pelvic exams. CADTH-developed search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, or network meta-analyses; and any types of clinical trials or observational studies. Where possible, retrieval was limited to the human population. The search was also limited to English-language documents published between January 1, 2013 and June 25, 2021. Internet links were provided, where available.

Selection Criteria

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed.

Results

One systematic review¹ with meta-analysis and 1 non-randomized study³ were identified regarding the clinical utility of routine pelvic examination for the detection of gynecological

Table 1: Selection Criteria

Criteria	Description
Population	Non-pregnant, asymptomatic women in a primary care setting
Intervention	Routine pelvic examination performed for the detection of gynecological malignancy, pelvic inflammatory disease, or other benign gynecological conditions (e.g., sexually transmitted infections) conducted alone or in combination with other gynecological tests
Comparator	Q1, Q2: Other gynecological tests (e.g., pap smear, HPV test, or ultrasound) for the detection of malignancy, pelvic inflammatory disease, or other benign gynecological conditions Q2: No comparator
Outcomes	Q1. Clinical utility (e.g., survival, identification and/or treatment of gynecological cancers, pelvic inflammatory disease, or other benign gynecological conditions) Q2. Harms (e.g., consequences of false-positives or false-negatives, overdiagnosis, overtreatment [e.g., unnecessary biopsy or surgery], fear, anxiety, embarrassment, pain, discomfort, infection [e.g., urinary tract infections], dysuria)
Study designs	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies

Q = question.

malignancy, pelvic inflammatory disease, or other benign gynecological conditions. One systematic review¹ with meta-analysis and 1 non-randomized study² were identified regarding the safety of routine pelvic examination for the detection of gynecological malignancy, pelvic inflammatory disease, or other benign gynecological conditions. No relevant health technology assessments or randomized controlled trials were identified.

Additional references of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

References

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

1. Guirguis-Blake JM, Henderson JT, Perdue LA. Periodic Screening Pelvic Examination: Evidence Report and Systematic Review for the US Preventive Services Task Force. *JAMA*. 2017 Mar;317(9):954-966. [PubMed](#)

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

2. Hostetter O, Hemal K, Hines KN, Matthews CA. Is a pelvic examination contributory in the initial evaluation of women with recurrent urinary tract infections? *Int Urogynecol J*. 2020 Jun;31(6):1209-1214. [PubMed](#)
3. Turek EM, Fairley CK, Bradshaw CS, et al. Are genital examinations necessary for STI screening for female sex workers? An audit of decriminalized and regulated sex workers in Melbourne, Australia. *PLoS ONE*. 2020 Apr;15(4):e0231547. [PubMed](#)

Appendix 1: References of Potential Interest

Systematic Reviews and Meta-analyses

Unclear Population (Primary Care Setting Not Specified)

4. Ebell MH, Culp M, Lastinger K, Dasigi T. A systematic review of the bimanual examination as a test for ovarian cancer. *Am J Prev Med.* 2015 Mar;48(3):350-356. [PubMed](#)
5. 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 Jul;161(1):46-53. [PubMed](#)

Alternative Population (Symptomatic Patients)

6. Williams P, Murchie P, Cruickshank ME, Bond CM, Burton CD. The use, quality and effectiveness of pelvic examination in primary care for the detection of gynaecological cancer: a systematic review. *Fam Pract.* 2019 Jul;36(4):378-386. [PubMed](#)
7. Williams P, Bond CM, Burton C, Murchie P. A systematic review of the use, quality and effects of pelvic examination in primary care for the detection of gynaecological cancer. *J Obstet Gynaecol.* 2018 Jul;38(5):737. [PubMed](#)

Non-Randomized Studies – Alternative Population (Non-Primary Care Setting)

8. Mahesan AM, Ilceski DM, Paul AB, Vengalil S. Pelvic Examination at the 6-Week Postpartum Visit After Cesarean Birth. *J Midwifery Womens Health.* 2016 Jul;61(4):497-500. [PubMed](#)
9. Tugut N, Golbasi Z. Aspects of emotional and physical discomfort in gynecologic examination: a study of Turkish women. *J Obstet Gynaecol Res.* 2014 Jun;40(6):1777-1784. [PubMed](#)