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https://doi.org/10.1016/j.annemergmed.2018.11.020

Funding and support: By *Annals* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article as per ICMJE conflict of interest guidelines (see www.icmje.org). The authors have stated that no such relationships exist.

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Why a Pelvic Exam is Needed to Diagnose Cervicitis and Pelvic Inflammatory Disease

To the Editor:

We respectfully disagree with the conclusions by Farrukh et al[1] that the pelvic examination may not be of added benefit in the evaluation of young female patients with suspected cervicitis or pelvic inflammatory disease. First, both cervicitis and pelvic inflammatory disease are clinical diagnoses that cannot be made without a pelvic examination. In accordance with the 2015 Centers for Disease Control and Prevention (CDC) sexually transmitted infection treatment guidelines, cervicitis is characterized by one or both of these major diagnostic signs: the presence of visible purulent or mucopurulent endocervical exudate or easily induced sustained endocervical bleeding. Pelvic inflammatory disease is a clinical diagnosis based on a history of pelvic or lower abdominal pain plus cervical, uterine, or adnexal tenderness on examination. The specificity of the diagnosis of pelvic inflammatory disease is enhanced by the clinical findings of abnormal cervical mucopurulent discharge or cervical friability or the presence of many WBCs in saline solution microscopy of vaginal fluid, further underscoring the importance of the examination. The CDC states that the absence of WBCs on a saline solution wet mount suggests that pelvic inflammatory disease is unlikely and other diagnoses to explain the clinical presentation should be considered.[2]

For a young female patient presenting with complaints suggestive of cervicitis or pelvic inflammatory disease, the only way to diagnose these clinical entities is by performing a pelvic examination to determine whether the clinical criteria are present. The correct diagnosis will guide treatment because pelvic inflammatory disease is treated with antibiotics for 2 weeks rather than with single-dose therapy. The diagnosis of a sexually transmitted infection is not needed to meet the clinical criteria for pelvic inflammatory disease or cervicitis, and organisms other than *Neisseria gonorrhoeae, Chlamydia trachomatis,* and *Trichomonas vaginalis* have been associated with both diagnoses. Simply testing for these sexually transmitted infections in women who present with lower abdominal or pelvic pain, as this article suggests, may fail to diagnose pelvic inflammatory disease and places young female patients at increased risk of incurring complications. Furthermore, performing a pelvic examination for women with genitourinary complaints is necessary to diagnose causes other than cervicitis or pelvic inflammatory disease, including nonsexually transmitted vaginitis, genital herpes simplex, and foreign body.

Twice the authors state that the use of the pelvic examination for asymptomatic women has been questioned by the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, and the CDC. Although this may hold true for asymptomatic patients, all patients in this study were symptomatic, rendering these statements irrelevant. The American College of Obstetricians and Gynecologists clearly recommends that a pelvic examination be performed for women with symptoms including vaginal discharge, pelvic pain, and urinary issues.[3] The American Academy of Pediatrics specifically states that a pelvic examination should be performed for young female patients with lower abdominal pain and persistent vaginal discharge, exactly the population represented in this study.[4] Thus, failing to perform a pelvic examination for symptomatic women, as this article suggests, would be a clear departure from the recommendations of these professional associations.

In summary, cervicitis and pelvic inflammatory disease are clinical diagnoses requiring a pelvic examination. Neglecting to conduct one for a symptomatic young

woman presenting to the emergency department places her at increased risk of complications from missed diagnoses.

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https://doi.org/10.1016/j.annemergmed.2018.11.028

Funding and support: By *Annals* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article as per ICMJE conflict of interest guidelines (see www.icmje.org). The authors have stated that no such relationships exist.

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In reply:

We appreciate the response from Mealy et al[1] in regard to our article "The Additive Value of Pelvic Examinations to History in Predicting Sexually Transmitted Infections for Young Female Patients With Suspected Cervicitis or Pelvic Inflammatory Disease."

We agree that not performing a pelvic examination during the evaluation of an adolescent with vaginal discharge and lower abdominal pain is a departure from the current recommendations put out by the Centers for Disease Control and Prevention, the American College of Obstetricians and Gynecologists, and the American Academy of Pediatrics. However, important technologic advances have occurred in recent years, including the advent of urine sexually transmitted infection nucleic testing and the availability of urine point-of-care sexually transmitted infection testing.[2] Without these tools, the pelvic examination was relied on to diagnose cervicitis and pelvic inflammatory disease, but our study and other publications indicate that the pelvic examination lacks the sensitivity, specificity, and interrater reliability found in current laboratory testing modalities.[3,4] Relying on these subjective examination findings may inappropriately dissuade a clinician or hospital from using highly accurate sexually transmitted infection testing and delay a diagnosis. Although the authors mention including vaginal fluid WBC counts for diagnosis, this is an operator-dependent test that has a low positive predictive value and is not routinely available in most clinical settings.

Although there are other causes for cervicitis and pelvic inflammatory disease besides chlamydia, gonorrhea, and trichomonas, visualization on a pelvic examination will not distinguish one cause from another and therefore not guide toward a focused antibiotic choice. Current recommendations call for different treatments for cervicitis and pelvic inflammatory disease, but the pelvic examination findings of cervical motion tenderness and adnexal tenderness lack interrater reliability and do not correlate well with sexually transmitted infection tests.[5,6] Finally, foreign bodies will be missed without the pelvic examination, but these are rare findings, and in our study the number of pelvic examinations needed to be performed to find 1 foreign body was 288.

As physicians, we all believe in the physical examination, but we should acknowledge when the examination lacks sensitivity compared with more accurate diagnostic techniques. Other diseases for which testing or imaging has superseded the diagnostic accuracy of the clinical examination include pneumonia, group A streptococcal pharyngitis, adnexal masses, and appendicitis. Our study clearly demonstrates the lack of discriminative utility in the routine evaluation of adolescents with vaginal discharge and lower abdominal pain.

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