

[www.icmje.org](http://www.icmje.org)). The author has stated that no such relationships exist.

1. Farrukh S, Sivitz AB, Onogul B, et al. The additive value of pelvic examinations to history in predicting sexually transmitted infections for young female patients with suspected cervicitis or pelvic inflammatory disease. *Ann Emerg Med.* 2018;72:703-712.
2. Kohlberg G, Hammer M. Calculate sensitivity and specificity, likelihood ratios, and post-test probability. Available at: <http://getthediagnosis.org>. 2008. Accessed January 6, 2019.
3. Goyal MK, Teach SJ, Badolato GM, et al. Universal screening for sexually transmitted infections among asymptomatic adolescents in an urban emergency department: high acceptance but low prevalence of infection. *J Pediatr.* 2016;171:128-132.
4. Tomas ME, Getman D, Donskey CJ, et al. Overdiagnosis of urinary tract infection and underdiagnosis of sexually transmitted infection in adult women presenting to an emergency department. *J Clin Microbiol.* 2015;53:2686-2692.

*In reply:*



We thank Dr. Akhter for interest in and comments on our article.

In Table 1, we describe the clinical information for patients with and without sexually transmitted infections. There were no significant differences between the 2 groups in regard to who had positive findings on point-of-care urinalysis for nitrites and leukocyte esterase. We did not have available point-of-care microscopy assessment for pyuria in our emergency department, nor did we follow each test with a urine culture.

There are studies that evaluate the presence of pyuria and specifically sterile pyuria in women who are known to have sexually transmitted diseases such as chlamydia, gonorrhea, or trichomonas. In a large retrospective study that included 1,052 women with sexually transmitted infection, Shipman et al<sup>1</sup> found 62% had no pyuria, 28% had sterile pyuria, and 10% had nonsterile pyuria. A smaller study by Shapiro et al<sup>2</sup> examined factors associated with sexually transmitted infection in women and found that leukocyte esterase, pyuria, or nitrites revealed by urinalysis did not predict results of sexually transmitted infection tests.

The evidence shows there is a high prevalence of urinalysis findings in women with sexually transmitted infections, but it is not something we can use to predict such infections because the majority of women with sexually transmitted disease have normal urinalysis results. The initial analysis from our study found no significant additional information from the point-of-care urinalysis, but the pelvic examination in combination with point-of-care urinalysis findings might help direct physicians toward a more accurate diagnosis. A strategy to improve medical care includes the development of a clinical decisionmaking rule for cervicitis and pelvic inflammatory disease. A

potential rule could involve elements from the history of presentation, the physical examination (including a pelvic examination), ultrasonographic findings, and point-of-care testing (for urinalysis and sexually transmitted infection).<sup>3</sup>

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1. Shipman SB, Risinger CR, Evans CM, et al. High prevalence of sterile pyuria in the setting of sexually transmitted infection in women presenting to an emergency department. *West J Emerg Med.* 2018;19:282-286.
2. Shapiro T, Dalton M, Hammock J, et al. The prevalence of urinary tract infections and sexually transmitted disease in women with symptoms of a simple urinary tract infection stratified by low colony count criteria. *Acad Emerg Med.* 2005;12:38-44.
3. Gaydos CA, Pol BVD, Jett-Goheen M, et al. Performance of the Cepheid CT/NG Xpert rapid PCR test for detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae*. *J Clin Microbiol.* 2013;51:1666-1672.

## Additive Value of Pelvic Examinations to History



*To the Editor:*

In the study of sexually transmitted infections by Farrukh et al,<sup>1</sup> the presented evidence is insufficient to justify the authors' call to abandon the current Centers for Disease Control and Prevention (CDC) pelvic examination criteria for pelvic inflammatory disease diagnosis.

First, the study is biased by combining 2 clinically diverse outcomes (cervicitis and pelvic inflammatory disease) into a single composite outcome merely because