

## LETTERS

## Review: Vaginal signs and symptoms perform poorly in diagnosing vaginal candidiasis

I read with interest the commentary by Doust in the Sep/Oct issue (1). I concur that the laboratory evaluation of vaginitis, in general, is superior to individual historical and physical findings. However, 3 additional points deserve emphasis. First, evaluating combinations of clinical findings for calculating likelihood ratios (LRs) would be helpful, as combinations have been evaluated in at least 1 other clinical entity (2). Second, evaluating LRs for previous use of antibiotics may prove useful, since they can predispose to vaginal candidiasis. Third, I would like to emphasize the value of the lack of odor in bacterial vaginosis (BV) and lack of yellow discharge in vaginal trichomoniasis (VT), as the negative LRs are 0.07 and 0.12, respectively. A physician could make the decision to treat a woman empirically for vaginal candidiasis with over-the-counter intravaginal miconazole without performing an expensive laboratory examination, provided there was no history of odorous discharge (BV) or yellow discharge (VT). For example, based on the prevalence of BV (46%) and VT (12%) (3), the posttest probabilities for the absence of odor and yellow discharge are 6.0% (BV) and 2% (VT). Neither probability is likely to be above one's treatment threshold. Only if miconazole therapy has failed and the patient has persistent or recurrent external genital symptoms would laboratory examinations be performed.

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### References

1. Doust J. Review: Vaginal signs and symptoms perform poorly in diagnosing vaginal candidiasis, bacterial vaginosis, and vaginal trichomoniasis. ACP Journal Club. 2004 Sep-Oct;141:47.
2. Nardone DA, Roth KM, Mazur DJ, McAfee JH. Usefulness of physical examination in detecting the presence or absence of anemia. Arch Intern Med. 1990;150:201-4.
3. Landers DV, Wiesenfeld HC, Heine RP, Krohn MA, Hillier SL. Predictive value of the clinical diagnosis of lower genital tract infection in women. Am J Obstet Gynecol. 2004;190:1004-10.

### Author response

Dr. Nardone is correct about the negative predictive value of the symptom of lack of odor for BV. He is also correct that lack of yellow discharge makes VT less likely, but this is only *when seen on physical examination*, and this conclusion is based on only 1 study of 9 patients. Further, it is not clear that lack of yellow discharge *as a symptom* is valuable for diagnosis of VT.

We felt that lack of itching was reasonably diagnostic in eliminating candidiasis. Thus, our formulation was that while symptoms were generally not good in distinguishing among the 3 causes, lack of itching makes *Candida* less likely and lack of odor makes BV less likely.

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## Correction

In the commentary for the abstract, "Review: Vaginal signs and symptoms perform poorly in diagnosing vaginal candidiasis, bacterial vaginosis, and vaginal trichomoniasis" (1), the second sentence of the second paragraph should be, "The absence of symptoms and signs is even less helpful in ruling out disease, with only the absence of odor ruling out BV, and absence of yellow discharge on physical examination ruling out VT." The original sentence was as follows:

"The absence of symptoms and signs is even less helpful in ruling out disease, with only the absence of odor or yellow discharge ruling out BV."

### Reference

1. Doust J. Review: Vaginal signs and symptoms perform poorly in diagnosing vaginal candidiasis, bacterial vaginosis, and vaginal trichomoniasis. ACP Journal Club. 2004 Sep-Oct;141:47.