The patient is a 19 year old female who has been in generally good health. She was seen in the past for birth control and once for cystitis. She now presents with a two day history of heavy vaginal discharge. This is slightly irritating but not itchy and does not have a bad odor. She admits to one regular sexual partner at this time but has had several others in the past. She has not douché nor used any intravaginal medication.

Physical Examination:
The patient had no abdominal tenderness. The external labia and vaginal mucosa were mildly erythematous. The cervix was normal in appearance and was nontender. A moderate amount of creamy discharge was present. The bimanual examination was unremarkable.

Laboratory Findings:
A saline wet prep of the discharge showed the findings seen in Figure 1. What is your diagnosis?

For the correct diagnosis see the next page.
Discussion
An examination of the vaginal specimen is the key step in diagnosing the reason for vaginitis. The "classic", historical, or physical examination findings are often missing in cases of Candida, Gardnerella, or Trichomonas vaginitis. Many times, there are more than one infecting organism. Therefore, one must always do a vaginal wet prep.

The long, thin organisms seen in Figure 1 are often confused with Candida. They are Leptothrix. This organism can be differentiated from Candida because it is not branching and has a thinner, finer, form. Leptothrix is always seen in patients who also have Trichomonas, so use it as a marker to look closer for Trichomonads. It is unclear whether this is a co-pathogen, but follow-up wet preps after treatment with metronidazole show that the Leptothrix is gone.¹

In addition to Leptothrix, this patient also has a Gardnerella infection. This can be identified by the slight "clueing" of the squamous cells as well as the presence of the small, coco-bacilli in the background of the figure.

Figure 2 is a vaginal wet prep with Candida. Note the thick walls of this organism. Both sides of the wall can be clearly identified. Also, note the yeast buds and the branching of the organism. It has a "heavier" appearance than the delicate appearance of Leptothrix.

References:

Figure 2. A vaginal wet prep from a patient with Candida vaginitis. The arrow indicates the typical appearance of the organism.