

Rates of Diagnosis and Treatment of Genital Tract Infections among the Women of Andahuaylillas: Comparing Self-Collected and Provider-Collected Vaginal Swabs using Light Microscopy as a Diagnostic Tool

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Introduction

- Genital tract complaints are very common amongst the women of the Peruvian Andes.
- The three most common vaginitis diagnoses are bacterial vaginosis, candidiasis, and trichomoniasis.
- In 2018 the use of wet mount microscopy was implemented as a means of diagnosing common gynecological complaints.
- Self-collected vaginal swabs offer a potentially feasible and/or desirable alternative to provider-collected swabs, particularly in a resource-limited setting.
- We aim to show that the use of self-collected swabs using light microscopy as a diagnostic tool is an accurate means of diagnosing lower genital tract infections.

Methods

- Fast Electronic Medical Record (fEMR) was used for data collection.
- Women examined in February and May of 2019 were included in data collection.
- Patients with clinical symptoms of vaginitis were offered a speculum exam or a self-swab to obtain a sample. Wet mount microscopy and Whiff test were used for diagnosis and subsequent treatment selection.
- Diagnosis, wet mount findings, and treatment provided were recorded in fEMR.
- Data was extracted from fEMR and sorted using Microsoft Excel.

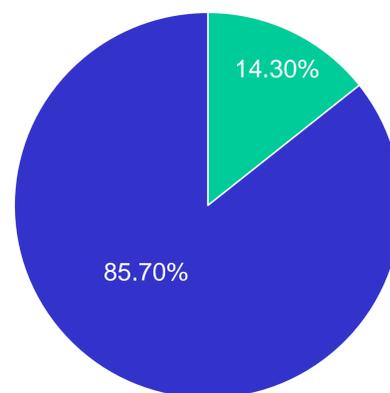
Results

	Provider-Collected Swabs	Self-Collected Swabs
Positive for vaginitis	18	34
Normal/non-diagnostic	3	7
Total	21	41



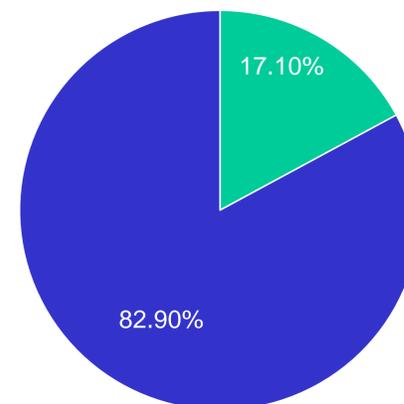
- 62 total wet mounts, of which there were 21 provider-collected swabs and 41 patient-collected swabs. All wet mounts in May were prepared from patient-collected swabs.
- Of the 41 self-collected swabs, 34 were positive for vaginitis (82.9%).
- Of the 21 provider-collected swabs, 18 were positive for vaginitis (85.7%).
- In addition, 14 total women were treated for suspected gonorrhea/chlamydia infection.

Provider-Collected



■ Normal/nondiagnostic ■ Positive

Self-Collected



■ Normal/nondiagnostic ■ Positive

Conclusions

- Use of self-collected swabs with wet mount and light microscopy as a diagnostic tool is an accurate and acceptable alternative to use of provider-collected swabs for diagnosis.
- In situations when a speculum exam is not a viable or desirable option, self-swabbing should be offered for sample collection.
- Wet mount microscopy is an easy, cheap, and portable method of diagnosing vaginitis in a rural clinical setting.
- The use of wet mount can help guide a clinician's suspicion of other STIs such as gonorrhea and chlamydia.
- In the future, we can plan to education materials regarding self-swabbing technique to increase precision in diagnosis.
- In the future, we hope to develop kits for patients to self-collect samples at home to bring into clinic.



References

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