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**PRESENCE OF *TRICHOMONAS VAGINALIS*, *CANDIDA*,  
*GARDNERELLA VAGINALIS* AMONG SYMPTOMATIC WOMEN  
ATTENDING SEXUALLY TRANSMITTED DISEASES CLINIC  
IN COLOMBO**

**PROJECT REPORT PRESENTED BY**

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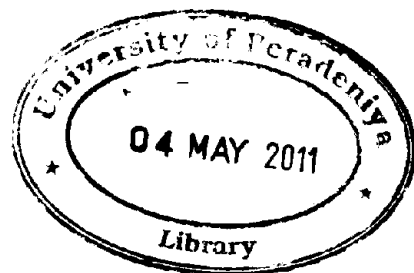
to the Board of Study in Plant Sciences of the  
**POST GRADUATE INSTITUTE OF SCIENCE**

*in partial fulfillment of the requirement  
for the award of the degree of*

**MASTER OF SCIENCE IN MEDICAL MICROBIOLOGY**

of the

**UNIVERSITY OF PERADENIYA  
SRI LANKA  
2010**



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The commonest types of sexually transmitted vaginitis are candidiasis, trichomoniasis and bacterial vaginosis. In Sri Lanka, prevalence studies of bacterial vaginosis and trichomoniasis are very few in number and, even among them the results are different. This study determined the percentage of *Trichomonas vaginalis*, *Candida*, and *Gardnerella vaginalis* in Sexually Transmitted Diseases clinic in Colombo.

Fifty female patients attending the clinic complaining of or, having vaginal discharge on examination were included in the study. Trichomoniasis was diagnosed using direct microscopy and culture on *Trichomonas* medium. Candidiasis was also diagnosed by direct microscopy and culture on Sabouraud dextrose medium. Bacterial vaginosis was diagnosed using direct detection of clue cells on vaginal smears and culture on *Gardnerella* selective medium.

Percentage of trichomoniasis was 4 % by direct microscopy and was 6 % by culture. Sensitivity and specificity of direct microscopy compared to culture were 66.6% and 100%, respectively. Since the sensitivity of microscopy is relatively low, culture is recommended for accurate diagnosis. Direct microscopy for trichomoniasis is easy to perform and quick method. Hence places where there is no culture facility direct microscopy can be recommended.

Percentage of candidiasis by direct microscopy was 12% and was 24 % by culture. There is a significant difference of percentage of candidiasis by culture and microscopy.

Sensitivity of direct microscopy was 50 %, which is significantly low when compared to culture which is considered the gold standard. Although using culture alone may over diagnosed the candidiasis in patient carrying *Candida* in the vagina, in the absence of positive smear culture can be recommended for diagnosis of candidiasis in symptomatic patients due to less sensitivity of direct microscopy

Percentage of *Gardnerella vaginalis* by microscopic examination of clue cells was 42% and by culture 50%. Sensitivity of clue cell detection is as sensitive as culture on *Gardnerella* selective medium. Detection of clue cells is easy to perform and less time consuming than culture. According to this study clue cell detection in vaginal smear can be recommended for the diagnosis of bacterial vaginosis.