

Prevalence of cervicitis and outcome: A hospital based study

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Abstract

Introduction: Cervicitis was first recognized as an important clinical entity in 1984 by Brunham *et al.*¹ Cervicitis is a frequently asymptomatic, inflammatory condition of the cervix. It is common with rates as high as 30–45% in some STI clinic populations. Cervicitis is thought to play an important role in the transmission of HIV infection, by increasing susceptibility to HIV infection and increased HIV viral shedding. The association of genital ulceration, particularly HSV related, with increased risk of HIV transmission risk is well recognized. **Aims and Objectives:** to study the pattern of various RTI's among symptomatic and asymptomatic every married women and to evaluate the Out Come of Cervicitis patients. **Methodology :** This is prospective study of all the women attending the Gynecology OPD with suspected of Cervicitis ; with or without the vaginal discharge and with or without symptoms were included. Total 283 patients were enrolled into the study. **Result:** Overall majority of the patients were from 20-29. In that Maximum symptomatic patients were also from 20-29 followed by 30-39, 50 and above, 40-49, and less than 19 years age group. Majority of the Symptomatic patients were having discharge i.e. 113(90.60%) out of all patients having discharge than asymptomatic patients having the discharge i.e. 12 (9.60%) out of 125. This observed difference was statistically significant. The causes of cervicitis were Candidiasis, Trichomoniasis, Bacterial Vaginosis, Mixed Infection in the decreasing order, in that majority of the Trichomonas patients were symptomatic i.e. 96.30% while mostly the mixed infections were asymptomatic (32.04%). Majority of the patients suffered from the bacterial vaginosis were recovered i.e. 100% while persistence of problem was most common in Mixed infections followed by candidiasis 33.76% and Trichomoniasis 22.10%. **Conclusions :** Symptomatic cases are mainly due to Trichomoniasis, bacterial vaginosis and they having good outcome while asymptomatic cases were mostly Mixed or Candidal infection and they are having unsatisfactory outcome so all the patients with asymptomatic infections should be treated cautiously with imperial antimicrobial agent.

Keyword: Cervicitis, STDs.

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INTRODUCTION

Cervicitis was first recognized as an important clinical entity in 1984 by Brunham *et al.*¹ Cervicitis is a frequently asymptomatic, inflammatory condition of the cervix. It is common with rates as high as 30–45% in some STI clinic populations^{1,2,3,4,5} and is generally considered to be associated with sexually transmissible

pathogens^{1,2,3,4, 5,6,7}. However, Chlamydia and Neisseria gonorrhoea account for less than half of cervicitis cases, with a largely undefined etiology in the remainder^{1,2-8,9}. Reproductive tract infections (RTIs) are a major cause of gynecological morbidity all over the world¹. In developing countries, the morbidity and mortality due to RTIs is very high. The consequences of RTI's are several and may be severe in some cases^{10,11}. Cervicitis is thought to play an important role in the transmission of HIV infection, by increasing susceptibility to HIV infection and increased HIV viral shedding. The association of genital ulceration, particularly HSV related, with increased risk of HIV transmission risk is well recognized¹².

AIMS AND OBJECTIVES

To study the pattern of various RTI's among symptomatic and asymptomatic every married women and to evaluate the Out Come of Cervicitis patients.

MATERIAL AND METHODS

This is prospective study of all the women attending the Gynecology OPD with suspected of Cervicitis ; with or without the vaginal discharge and with or without symptoms were included into the study those below the 18 and who does not consented were excluded from the study. The cervical smear were examined for Microbiological examination by Gram Staining. Total 283 patients were enrolled into the study.

RESULTS

Table 1: Distribution of subjects as per age

Age (yrs)	Symptomatic women	Asymptomatic women	Total
≤19*	8 (40.00%)	12 (60.00%)	20 (100%)
20-29	101 (53.70)	87 (47.30%)	188(100%)
30-39	21(52.50%)	19 (48.50%)	40(100%)
40-49	10 (45.40)	12 (55.60%)	22(100%)
50 and above	6 (46.10)	7 (54.90%)	13(100%)
Total	146 ((51.60)	137 (49.40%)	283(100%)

In **Table 1:** Overall majority of the patients were from 20-29 In that Maximum symptomatic patients were also from 20-29 followed by 30-39, 50 and above, 40-49, and less than 19 years age group.

Table 2: Distribution of women with and without persistent vaginal discharge

Presence of vaginal discharge	Symptomatic women (N=136)	Asymptomatic women (N=127)	Total
Persistent vaginal discharge	113 (90.40%)	12 (9.60%)	125 (100%)
No persistent vaginal discharge	33 (20.00%)	125 (79.11%)	158(100%)
Total	136 (48.05%)	127(44.87%)	283(100%)

$\chi^2=117, p<0.005$

In **Table 2:** Majoriy of the Symptomatic patients were having discharge i. e. 113(90.60%) out of all patients having discharge than asymptomatic patients having the discharge i.e. 12 (9.60%) out of 125 this observed difference was statistically significant.

Table 3: Distribution of infections found by wet smear/Gram stain examination

Smear examination	Symptomatic women (N=108)	Asymptomatic women (N =16)	Total
Candidiasis	39 (90.70%)	4 (10.30%)	43 (100%)
Trichomoniasis	26 (96.30%)	1 (3.70%)	27(100%)
Bacterial Vaginosis	23 (92.00%)	2 (8.00%)	25(100%)
Mixed Infection	20(68.96%)	9 (32.04%)	29(100%)
Total	108 (87.00%)	16 (13.00%)	124(100%)

From **Table 3:** the causes of cervicitis were Candidiasis, Trichomoniasis, Bacterial Vaginosis, Mixed Infection in the decreasing order, in that majority of the Trichomonas patients were symptomatic i.e. 96.30% while mostly the mixed infections were asymptomatic (32.04%).

Table 4: Outcome of Cervicitis with respect to infective agent

Smear examination	Recovered	Persistent of discharge	Total
Candidiasis	36 (67.34%)	13 (33.76%)	49 (100%)
Trichomoniasis	24(88.90%)	3 (22.10%)	27(100%)
Bacterial Vaginosis	25 (100.00%)	0 (00.00%)	25(100%)
Mixed Infection	15 (65.20%)	8 (35.80%)	23(100%)
Total	94 (75.80%)	21 (35.20%)	124(100%)

From Table 4: Majority of the patients suffered from the bacterial vaginosis were recovered i.e. 100% while persistence of problem was most common in Mixed infections followed by candidiasis 33.76% and Trichomoniasis 22.10%.

DISCUSSION

In Table 1: Overall majority of the patients were from 20-29 In that Maximum symptomatic patients were also from 20-29 followed by 30-39,50 and above,40-49, and less than 19 years age group. This could be due to the reason that mostly the women are sexually active in this age group and cervicitis is caused due to the part of STD infection and in the age group of 50 and above found more because of the reason that vaginal P^H Changes after the age of 50 leading to prone for the infection. In Table 2: Majoriy of the Symptomatic patients were having discharge i.e. 113(90.60%) out of all patients having discharge than asymptomatic patients having the discharge ie 12 (9.60%) out of 125, this observed difference was statistically significant as vaginal discharge is more likely to be with the symptoms like pain, itching, foul smelling etc. In the present study, frequency of women with candidiasis, trichomoniasis and bacterial vaginosis differs from the findings reported by Singh *et al* (1995)¹³ and Garg *et al* (2002)¹⁴ From Table3: the causes of cervicitis were Candidiasis, Trichomoniasis, Bacterial Vaginosis, Mixed Infection in the decreasing order in that majority of the Trichomonas patients were symptomatic i.e. 96.30% while mostly the mixed infections were asymptomatic (32.04%). That is the reason that Trichomonas infections get diagnosed earlier while the mix infections remains latent causing mixed etiology of the infections. From Table 4: Majority of the patients suffered from the bacterial vaginosis were recovered ie 100% while persistence of problem was most common in Mixed infections followed by candidiasis 33.76% and Trichomoniasis 22.10% this can

be explained that the as the Trichomonas and Bacterial vaginosis infections are diagnosed and get treated earlier due to symptomatic nature while candidiasis and mixed infections remains undetected and improper treatment is the reason of their less recovery and also the pathogen fungi are more resistant to the antimicrobial therapy.

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