

Study of Correlation between Clinical Diagnosis by Syndromic Approach and Aetiological Laboratory Diagnosis amongst Women with Vaginal Discharge due to Candidial Vulvo-vaginitis and Bacterial Vaginosis Presenting to Gynecology OPD

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Abstract: ***Aims:** To study Correlation between clinical diagnosis by Syndromic approach and etiological laboratory diagnosis. **Setting and Design:** This observational study was carried out at Gynecology OPD in tertiary care hospital in Gujarat, India. **Material and Methods:** Total of 500 consenting subjects diagnosed as infective vaginal discharge based on syndromic approach were recruited for study. Their clinical profile was noted and they were investigated for Bacterial vaginosis and Vulvo vaginal candidiasis.*

Keywords: bacterial vaginosis and vulvovaginal candidiasis

1. Introduction

Vaginitis is a common disease that affects women health with over 50% of the women experiencing at least one episode of vaginal infection in their lifetime. It occurs in 1-14% of all women in the reproductive age group and is responsible for 5-10 million OPD visits per year throughout the world. The prevalence of vaginal discharge in India is estimated to be 30%. Infectious vaginitis is most commonly grouped in three major categories of the disease based upon microbial aetiology: Bacterial vaginosis, Vaginal Candidiasis and Vaginal Trichomoniasis. Because these three infectious syndromes are caused by different group of microorganisms, accurate and reliable diagnosis is necessary to initiate appropriate treatment.

Successful management of symptomatic vaginal discharge lies in the diagnostic approach. The traditional approach to diagnosis is through laboratory diagnosis of the etiological agents. This approach is expensive and not available at all health centres or dispensaries. Most of the times a presumptive diagnosis is made on the nature of discharge, which is often inaccurate and incomplete.(6,7).

The present study was conducted to determine the accuracy of visual/presumptive diagnosis of symptomatic vaginal discharge and to evaluate if addition of simple microscopic technique such as Gram's stain can aid in the accurate diagnosis of this common condition. This study also tries to evaluate the accuracy of blanket therapy advocated by WHO in the syndromic management of Vaginal discharge.

Inclusion criteria:

- Consenting women with clinical evidence of infective vaginal discharge.

Exclusion criteria:

- Women with vaginal discharge of non-infective origin.

- Women with clinical evidence of infective vaginal discharge who did not give consent for enrolment in the study.
- Pregnant women with infective Vaginal discharge.
- Known HIV positive women with vaginal discharge

Table 1

Characteristic	Number of subjects (n=500)	Percentage
Age		
<20 years	29	5.8%
20-25 years	150	30%
>25 years	321	64.2%
Socio Economic Status		
Lower	451	90.2%
Middle	41	8.2%
Upper	08	1.6%
Marital status		
Married	480	96%
Unmarried	20	4%
Obstetric History		
Nullipara / Para 1	130	26%
Para 2	170	34%
≥ Para 3	200	40%
Presenting Complaints		
Pruritis vulva	149	29.8%
Dysuria	133	26.6%
Dyspareunia	34	6.8%
Lower abdominal pain	48	9.6%
Treatment for similar complaints in last six months		
Yes	157	31.4%
No	343	68.6%
Consistent use of barriers in last six month		
Yes	138	27.6%
No	362	72.4%
Associated Diabetes mellitus		
Yes	36	7.2%
No	464	92.8%

- Majority of our subjects are more than 25 year old, belong to low socio economical status, married and are multipara.
- The commonest associated complaint noted in my subjects was pruritis vulva which was seen in 29.8% subjects, followed by dysuria in 26.6% subjects.
- 31.4% subjects had taken treatment for similar complaints in the previous six months suggesting improper or incomplete treatment taken previously or re-infection.

Our observations (examination findings), clinical diagnosis and lab diagnosis results are presented below in Table 2

Table 2

	Number of subjects (n=500)	Percentage
Examinations findings		
Lower abdominal tenderness	41	8.20%
Per speculum findings		
Curdy white discharge	145	29%
Frothy green discharge	15	3%
Greyish discharge	240	48%
Mucopurulent discharge	100	20%
Clinical diagnosis		
Trichomonas vaginitis	15	3%
Vulvovaginal candidiasis	145	29%
Bacterial vaginosis	240	48%
Cervicitis	100	20%
Laboratory findings		
Serological results (n=500):		
RPR positive	10	2%
HIV positive	27	5.4%
Nugent score (n=132)		
0-3	9	
4-6	35	
7-10	88	
Candidiasis (n=500)	96	38%

Table 2 reveals that lower abdominal tenderness was noted in 8.2% subjects.

- Greyish discharge was commonest and seen in 48% subjects
- Curdy white discharge adherent to the lateral vaginal wall was seen in 29% subjects,
- Mucopurulent cervical discharge in 20% subjects,
- frothy green discharge was seen in 3% subjects.

Based on the symptoms and clinical examination findings the distribution of diagnosis was as follows:

- **Bacterial vaginosis 48% (commonest)**
- Trichomonal vaginitis in 3%
- Cervicitis in 20%
- Vulvovaginal candidiasis in 29% subje

Result of clinical diagnosis as per syndromic approach to the lab diagnosis as is presented in table 3 below:

Table 3

Clinical diagnosis as per syndromic approach guidelines	Lab diagnosis		
	Correlates with clinical diagnosis	Does not correlate with clinical diagnosis	Total
VVC	96	49	145
BV	88	152	240
Total	184	201	385

- Of the 385 subjects with VVC (n=145) and BV (n=240); lab diagnosis correlated in 184 (47.79%) and it did not correlate in 201 (52.20%) subjects.
- Correlation with lab diagnosis was seen in 96 out of 145 in VVC (66.2%) and in 88 of 240 subjects with BV (36.66%).. The follow-up visit results are as follows:

Table 4

Clinical diagnosis	Available for follow up	Improvement in symptoms	No improvement in symptoms
BV(n=240)	200	180	20
VVC (n=145)	140	108	32
TV (n=15)	15	13	02
Cervicitis (n=100)	98	83	15
Total (500)	453	384	69

- Of the 500 subjects, 453 (90.6%) presented for follow up at 14 days after initial visit.
- A total of 384 out of these 453 (84.76%) subjects reported improvement in symptoms, while 69 of 453 (15.23%) did not have any improvement in symptoms.

Relief in symptoms was noted in 180 of 200 (90%) of BV cases, 108 of 140 (77.14%) of VVC cases, 13 of 15 TV cases (86.66%) and 83 of the 98 (84.69%) cervicitis subjects who turned up after 14 days.

2. Conclusion

In my study laboratory correlation with clinical diagnosis based on Syndromic Approach from the "National technical Guidelines for treatment to RTI/STI September 2014" was seen in 47.79% subjects only. But 84.76% subjects managed as per the national guidelines responded to the therapy.

Considering the satisfactory response rate to therapy based on syndromic approach it can be said that syndromic approach to RTI/ STI is practical option for management of vaginal discharge considering the expense and delay involved in a etiological diagnosis.

References

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