



STUDY TO EVALUATE TARGETED MANAGEMENT AND SYNDROMIC MANAGEMENT IN WOMEN PRESENTING WITH ABNORMAL VAGINAL DISCHARGE.

Obstetrics & Gynaecology

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ABSTRACT

Vaginal discharge is a common complaint among women in reproductive age group. Vaginitis and cervicitis are cause of infective vaginal discharge. Vaginitis mainly caused by Bacterial vaginosis, vaginal candidiasis and vaginal trichomoniasis and cervicitis is caused by chlamydia or gonococcal infection. Targeted managements consists of causative organism while syndromic managements is based on high risk factors.

METHODOLOGY: A randomized control trial clinical study was carried out at tertiary care center which included one hundred fifty patients with abnormal vaginal discharge, divided into two groups A and B each of 75 women. Group A underwent laboratory investigations and treatment was started based on reports and Group B was given syndromic managements based on high risk. **RESULTS:** Targeted management cure rate for vaginitis was 77.7% whereas 28.57% in syndromic management and for cervicitis 60% in targeted management and 46.6% in syndromic management.

KEYWORDS

Abnormal Vaginal Discharge , Syndromic Management, Targeted Management

INTRODUCTION

Pelvic inflammatory disease is a clinical diagnosis suggesting that patient has upper genital tract infection and inflammation. It is caused by microorganisms colonizing the endocervix and ascending to endometrium, fallopian tubes, ovaries, pelvic peritoneum, and parametrium.

INCIDENCE :

It varies from 1-2% per year among sexually active women. 85% are spontaneous infection in sexually active females of reproductive age group and 15% are the one who follows procedures like endometrial biopsy, uterine curettage, insertion of iud and hysterosalpingography.

RISK FACTORS:

- Sexually active teenagers
- Youngers age<19 years
- Multiple sexual partners
- Absence of contraceptive pill use
- Previous history of acute pid
- Lower socioeconomic status
- iud users (not with LNG-IUS)
- sexual partner with urethritis or STI

PID is commonly caused by primary organisms like Chlamydia trachomatis(30%), Neisseria gonorrhoeae and secondary organisms like E.coli, non-haemolytic streptococci, group B Streptococci, Staphylococci, and anaerobic organism like Bacteroids, Peptococcus and peptostreptococcus.

DIAGNOSTIC CRITERIA OF PID:

MINIMUM CRITERIA: To start empirical treatment of PID Pelvic or lower abdominal pain with Cervical motion tenderness or uterine tenderness, adnexal tenderness

ADDITIONAL CRITERIA:

To enhance specificity of diagnosis

- Oral temperature >101 F or 38.3C
- Abnormal cervical or vaginal mucopurulent discharge
- Abundant WBCs on saline microscopy of vaginal secretions
- Elevated ESR
- ELEVATED CRP
- Lab documentation of infection with gonorrhoea or chlamydia

SPECIFIC CRITERIA:

- Endometrial biopsy with histopathic evidence of pid

- TVS or MRI showing thickened fluid filled tubes or TO complex or tubal hyperemia on doppler
- Laparoscopic findings of PID

CONDITIONS CAUSING VAGINAL DISCHARGE:

- BACTERIAL VAGINOSIS
- AEROBIC VAGINITIS
- VULVOVAGINITIS
- TRICHOMONIASIS

BACTERIAL VAGINOSIS:

Most common cause of vaginal discharge in reproductive age group.

Multiple sex partners, female partners and oral sex are associated risk factors.

DIAGNOSIS:

Done by AMSEL CRITERIA: a) thin, white, yellow homogeneous discharge. b) clue cells on microscopy. c) pH of vaginal fluid >4.5 d) release of fishy odour on adding alkali-10% KOH solution. 3 out of 4 criteria should be present for a confirmed diagnosis.

TREATMENT:

METRONIDAZOLE OR CLINDAMYCIN orally is given.

AEROBIC VAGINITIS:

Disturbance of microbiota leading to inflammation and yellow to green thick and mucoid discharge.

DIAGNOSIS:

Score is calculated according to : lactobacillus grade, presence of inflammation, proportion of toxic leucocytes, characteristics of microflora and presence of immature epithelial cells.

TREATMENT:

There is a role for local estrogen therapy, corticosteroids, clindamycin and probiotics.

TRICHOMONAS:

Leads to profuse, purulent malodorous vaginal discharge, vulvar pruritus. Strawberry vagina and cervix seen. Incubation period 3-4 weeks. Vagina, urethra, endocervix and bladder can be infected. HIV is a risk factor.

DIAGNOSIS:

Leucocytes and motile trichomonas seen in unstained wet films.

NAAT is 3-5 times more sensitive than wet mount culture.

TREATMENT:

METRONIDAZOLE AND TINIDAZOLE is drug of choice.

VULVOVAGINITIS:

Candida albicans is a commensal in oral cavity, rectum vagina. Recent prolonged use of broad spectrum antibiotics, extremes of ages, poorly controlled DM, oral contraceptives use and pregnancy are associated risk factors. Thick curdy white discharge with vagina and labia edema.

DIAGNOSIS:

Budding yeast forms, hyphae, mycelia seen on gram stain or culture.

TREATMENT:

FLUCONAZOLE 150mg single dose or AZOLE pessary for 3 days.

CERVICITIS:

Caused by A) Neisseria gonorrhoeae: gram negative coccobacillus invading columnar and transitional epithelial cells of cervix sparing vaginal squamous epithelium and presents with profuse, odourless, non

irritating and white to yellow vaginal discharge.

DIAGNOSIS:

done by Culture and NAAT.

TREATMENT: AZITHROMYCIN, CEFTRIAXONE are used. B) Chlamydia trachomatis: obligate intracellular parasite, depends on host cells for survival infecting columnar epithelial cells and endocervical glands and presents with mucopurulent discharge.

SYNDROMIC MANAGEMENT: Refers to the approach of treating STI/RTI symptoms and signs based on the organism most commonly responsible for each syndrome on patient's first visit, helping to prevent the further spread of STIs where etiological diagnosis is not available. Syndromic case management also includes patient education (about the infection, transmission, risky sexual behaviour and how to reduce the risk), partner management and the provision of condoms and lubricants.

AIM OF STUDY:

To evaluate targeted management and syndromic management in women presenting with abnormal vaginal discharge in a tertiary health care system.

STI/RTI SYNDROMIC CASE MANAGEMENT

Urethral Discharge	Cervical Discharge	Penile/Scrotal Swelling	Vaginal Discharge	Genital Ulcer-Non Herpetic	Genital Ulcer - Herpetic	Lower Abdominal Pain (LAP)	Inguinal Bubo (IB)
Urethral Discharge (Pus or mucus-purulent) Pain or burning while passing urine Increased frequency of urination Systemic symptoms like malaise, fever	Nature and type of discharge (quantity, color and odor) Burning while passing urine, increased frequency Genital complaints by sexual partners Low backache (Take menstrual history to rule out pregnancy)	Swelling and pain in the scrotal region Pain or burning while passing urine Systemic symptoms like malaise, fever History of urethral discharge	Nature and type of discharge (quantity, color and odor) Burning while passing urine, increased frequency Genital complaints by sexual partners Low backache (Take menstrual history to rule out pregnancy)	Genital ulcer, single or multiple, painful or painless Burning sensation in the genital area Enlarged lymph nodes	Genital ulcer or vesicles, single or multiple, painful, recurrent Burning sensation in the genital area	Lower Abdominal Pain Fever Vaginal Discharge Menstrual irregularities like heavy, irregular vaginal bleeding Dysmenorrhea, dyspareunia, dysuria, tenesmus Lower backache Cervical motion tenderness	Swelling in inguinal region which may be painful Preceding history of genital ulcer or discharge Systemic symptoms like malaise, fever etc
Tab. Azithromycin 1 gm OD Stat + Tab. Cefixime 400 mg OD Stat NT 15day	Tab. Azithromycin 1 gm OD Stat + Tab. Cefixime 400 mg OD Stat NT 15day	Tab. Azithromycin 1 gm OD Stat + Tab. Cefixime 400 mg OD Stat NT 15day	Tab. Doxycycline 2 g OD Stat + Cap. Fluconazole 150 mg OD Stat NT 25days	If susceptible parasite (2.4 MG) - 1 tab Tab. Azithromycin (1 gm) - Single dose NT 20days	If allergic to 1st Penicillin Doxycycline 100 mg BD for 14 days Azithromycin 1200 (Single dose) NT 40days	Tab. Azithromycin 400 mg TDS for 7 days NT 5day	Tab. Cefixime 400 mg OD stat + Tab. Metronidazole 400 mg BD x 14 days + Doxycycline 100 mg BD x 14 days NT 6/10days
Treat all recent partners	Treat partners when symptomatic	Treat all recent partners	Treat partners when symptomatic	Treat all sexual partners for past 3 months	No partner treatment	Treat male partners with 1:1	Treat all sexual partners for past 3 weeks

IMPORTANT CONSIDERATIONS FOR MANAGEMENT OF ALL STI/RTI

- Educate and counsel client and sexual partner/s regarding STI/RTI, safer sex practices and importance of taking complete treatment
- Treat partner/s
- Advise sexual abstinence or condom use during the course of treatment
- Provide condoms, educate about correct and consistent use
- Refer all patients to ICTC
- Follow up after 7 days for all STI, 3rd, 7th, and 14th day for LAP and 7th, 14th, and 21st day for IB
- If symptoms persist, assess whether it is due to re-infection and advise prompt referral
- Consider immunization against Hepatitis B

NACO
 National AIDS Control Organisation
 India's voice against AIDS

suraksha clinic

STUDY DESIGN:

It is a randomized control trial clinical study.

SELECTION OF CASES:

The study was conducted on 150 patients in Nalanda Medical College, Patna during period of may 2019 to December 2021 who were presented with abnormal vaginal discharge, divided into 2 groups A and B each consisted of 75 women.

Group A underwent laboratory investigations and treatment was started as soon as reports were available. Group B was given syndromic management based on high risk factors present. Both groups were followed after 2 weeks.

SAMPLE SIZE:

A total of 150 cases were selected and studied.

INCLUSION CRITERIA:

women presenting with A) acute abdominal pain B) fever C) pelvic discomfort D) dyspareunia E) vaginal discharge

EXCLUSION CRITERIA:

Patients not willing to get enrolled in study.

RESULTS:

Total of 150 women with inclusion criteria were observed during this study and following observation were made.

Table 1 Demographic Details ,color Of Discharge,odour And Associated Symptoms.

	BACTERIAL VAGINOSIS	CANDIDIASIS	GONORRHOEA	TRICHOMONIASIS	CHLAMYDIA	NO ORGANISM
NUMBER N=75	25	30	2	2	6	10
PERCENTAGE (%)	33.33	40	2.6	2.6	8	13.33
COLOUR OF DISCHARGE						
WHITE(%)	12(18)	26.66(40)	0.6(1)	0.6(1)	0.6(1)	5.3(8)
GRAYISH-WHITE(%)	6.66(10)	4(6)	2(3)	0	1.3(2)	6.66(10)
YELLOWISH(%)	0.66(1)	5.33(8)	1.33(2)	2.66(4)	2.66(4)	1.33(2)
ODOUR						
FISHY(%)	16(24)	6.66(10)	2.66(4)	1.33(2)	0	2.6(4)
NON-FOULSMELLING (%)	3.33(5)	4(6)	0.66(1)	0.66(1)	0	6.66(10)
SYMPTOMS						
ITCHING	20(30)	26.66(40)	2(3)	1.33(2)	0.66(1)	
DYSURIA(%)	13.33(20)	16.66(25)	1.33(2)	2.66(4)	0	
DYSPAREUNIA (%)	5.33(8)	4(6)	2.66(4)	1.33(2)	0.66(1)	
PELVIC DISCOMFORT (%)	6.66(10)	2.66(4)	0.66(1)	0	1.33(2)	

Table 2. Associated Symptoms With Abnormal Vaginal Discharge In Both Groups.

ASSOCIATED SYMPTOMS	NO. OF PATIENT	GROUP A (%)	NO.OF PATIENT	GROUP B (%)
FEVER	2	2.6	0	0
ITCHING	40	53.33	45	60
MENORRHAGIA	1	1.3	15	20
PELVIC DISCOMFORT	10	13.33	20	26.66
DYSURIA	20	26.66	10	13.33
DYSPAREUNIA	10	13.33	15	20

Table 3. Response Totreatment OfVaginitis In Both Groups

RESULT	GROUP A (TARGETED MANAGEM ENT)	CUR ED	(%)	GROUPB (SYNDRO MIC MANAGE MENT)	CUR ED	(%)	P VALUE
VAGINI TIS	40/45	35	77.7	35	10	28.57	<0.001
VAGINI TIS + CERVI CITIS	23/25	20	80	25	5	20	<0.001
CERVI CITIS	12/15	9	60	15	7	46.6	<0.001

The efficacy of targeted management of abnormal vaginal discharge vaginal discharge in comparison to syndromic management that is being offered was found to be statistically significant(p value less than 0.001).Thus, targeted management after identifying the causative pathogenic organism should be considered in patient with recurrent vaginal discharge thus, avoiding antibiotic overusage.

DISCUSSION:

Response to treatment for vaginitis was 77.7% in targeted management group, whereas 28.57% in syndromic management group. With cervicitis, 60% women responded in targeted group as compared to 46.6% in syndromic management group. Low response to treatment in syndromic management group is due to low sensitivity of clinical examination in diagnosing the nature of vaginal discharge. Thus, the diagnosis should be confirmed in laboratory and for resistant cases high vaginal swab should be sent.

CONCLUSION:

Abnormal vaginal discharge is the most common complaints in gynaecological outpatient facility and it required careful examination to identify the exact etiology. There is need of reassurance as part of patient to know that what constitutes normal vaginal discharge. Syndromic management is advantageous in that there is initiation of treatment without delay but the response to the treatment protocol is often less resulting patient being exposed to numerous antibiotic therapy. The study showed that targeted approach to treatment of abnormal vaginal discharge is effective and patient satisfaction is achieved. Thus, targeted management should be advocated in

treatment of recurrent vaginal discharge.

REFERENCES:

1. Nyirjesy P. Management of persistence vaginitis. *Obstet Gynecol* 2014; 124 (6):1135-1381.
2. Eschenbach DA, Davick PR, Williams BL, et al. Prevalence of hydrogen peroxide-producing *Lactobacillus* species in normal women and women with vaginal vaginosis. *J Clin Microbiol* 1989;27(2):251-256.
3. Spiegel CA, Amsel R, Eschenbach DA, et al. Anaerobic bacteria in nonspecific vaginitis. *N Engl J Med* 1980;303(11):601-607.
4. SOPER DE. Taking the guesswork out of vaginitis. *Contemp obstet Gynecol* 2005;50:32-39.
5. Sobel JD. Recurrent vulvovaginal candidiasis. *Am J Obstet Gynecol* 2016;214(1):15-21.
6. SOPER DE. Pelvic inflammatory disease. *Obstet Gynecol* 2010;116 (2 Pt 1):419-428.