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BACTERIAL VAGINOSIS;
FREQUENCY IN OPD PATIENTS AT GHAQ HOSPITAL SAHIWAL

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ABSTRACT… Objectives: The aim of the study is to detect the frequency of Bacterial Vaginosis in the outpatient clinic of Obs & Gyne Department of GHAQ Sahiwal. **Design:** It is an observational study. **Materials and methods: Setting:** In the outpatient gyne department of GHAQ Sahiwal. **Period:** Six months. 500 patients were selected with complaint of discharge. Amsel criteria was used for diagnosis. For statistical analysis "Association test of Significance" was used. **Main outcome measures:** Occurrence of Bacterial Vaginosis in OPD patients and its association with certain risk factors and complications. **Results:** Out of 500 patients, 105 were found to have BV. So frequency is 21%. Out of 105 cases of BV, 16 (15.2%) were asymptomatic, 12 (11.42%) pregnant, 93 (88.57%) non pregnant. Significant association was found between BV, preterm labour, pre PROM and IUCD use. **Conclusion:** Vaginal discharge is one of the commonest reasons for hospital visit and Bacterial vaginosis is the commonest diagnosis so screening of patients with this condition is advised.

Key words: Vaginal Discharge, Bacterial Vaginosis, Amsel's Criteria, Preterm Labour.

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INTRODUCTION

Bacterial vaginosis is a common cause of malodorous vaginal discharge in women of reproductive age group.[1] BV is a clinical syndrome resulting from replacement of the normal Hydrogen peroxide producing lactobacillus species in the vagina with high concentration of anaerobic bacteria (e.g bacteroids species, provetella and mobilincus), gardenella vaginalis and mycoplasma hominis.[2]

BV was first described in 1955 by Gardner and Dukes. They described strong correlation between BV ànd Gardnerella vaginalis.

The absolute prevalence of BV varies considerably in populations studied e. g 18% of women attending clinics. 24-37% of women attending STD clinics & 5-24% women attending STD clinics.[3,4]

BV has been linked to low birth weight infants, preterm delivery, chorioamnionitis, post hysterectomy cuff cellulitis, post surgical endometritis.

The aetiolog of BV remains unknown and it is unclear if any of BV associated anaerobes are capable of disrupting an established lactobacillus population and initiate colonization of vaginal epithelium. It is associated with several risk factors e. g high numbers of sexual partners, lower age of first intercourse, previous history of STDs, having new sexual partner, vaginal douching, smoking and using an IUCD. Bacterial vaginosis is associated with increased prevalence and late clearance of Human papillary virus.[4] it is associated with higher rates of preterm birth and late fetal loss.[5] it is associated with pelvic inflammatory disease as well. Treatment is metronidazole or clindamycin.

In this study we found out the frequency of bacterial vaginosis in our set up and its association with certain risk factors and complications.

MATERIALS AND METHODS

This was a prospective study carried out in the

department of obstetrics & gynecology of gyne unit 2 at GHAQ teaching hospital of Sahiwal medical college. 500 patients attending to gynecology outpatient department of Government Haji Abdul Qayyum Teaching Hospital affiliated with Sahiwal Medical College Sahiwal having history of abnormal vaginal discharge were included in the study.

Procedure

After speculum examination for characteristic vaginal discharge, it was taken on three glass slides, one Checked for pH, to the other one a drop of KOH solution was added, to the third one, a drop of normal saline was added and examined under microscope for clue cells. Using Amsel's criteria, If three out of four positive, result was taken as positive for bacterial vaginosis.

RESULTS

Out of 500 patients, 105 were found to have bacterial vaginosis. So incidence of bacterial vaginosis in my study is 21%. out of these 105 cases, 16 (15.2) asymptomatic, 12 (11.42%) pregnant, 93 (88.57%), 32 (30.47%) had elective termination of pregnancy. 30 (28.57%) were IUCD users and 29 (27.61%) had mid trimester miscarriage.

History of preterm labour was present in 41 (39.04%), PREPROM in 30 (28.57%), low birth weight 29 (27.61%) and neonatal jaundice in 25 (23.80%) cases. Inflammatory changes in the cervix were present in 38(36.19%) patients. Significant association was found between BV, PTL, PreProm, low birth weight, IUCD use, midtrimester miscarriage, use of medication and puerperal symptoms.

Sr. No	Risk factors and variables	Positive cases	Percentage
1	Pregnant	12	11.42%
2	non pregnant	93	88.57%
3	Symptomatic	89	84.76%
4	Asymptomatic	16	15.2%
5	IUCD users	30	28.57%
6	elective termination of pregnancy	32	30.47%
7	Smoking	5	4.76%

Table-I. Distribution of different risk factors and variables

Sr. No	Complications	Positive cases	Percentage %
1	PID	68	64.76%
2	PTL	41	39.04%
3	cervical changes	38	36.19%
4	Pre-Prom	30	28.57%
5	low birth weight	29	27.61%
6	Miscarriage	29	27.61%
7	neonatal jaundice	25	23.80%

Table-II. Distribution of different Complications n =105 (positive cases)

DISCUSSION

Bacterial vaginosis is quite irritating for suffering women. According to my study the frequency is 24.9%. It is 4.9 -36% in developed world by Henn at el.[6] Non pregnant patients were 88.57% and pregnant 11.42%. Incidence quoted in different studies is variable. According to Alfonsi at el 2004, 15-20% of pregnant women suffer from BV.[7] It is 21% in pregnant patients with preterm labour by Alia Islam and others, conducted in CMH Rawalpindi.[8]

In our study, 15.2% patients were asymptomatic. Donders 2010 also mentioned asymtocmatic cases in his study.[9]

All patients had single sex partners and belonged to low socioeconomic set up, class III, IV and V. 28.57 % cases of BV positive cases had IUCD as contraceptive measure. In a study by Om SH, 2015, the frequency of BV in IUCD users is 29.4%.[10]

History of Elective termination of pregnancy was present in 30.47% patients with bacterial vaginosis. Bacterial vaginosis Patients with history of elective termination were mentioned by Fethers 2008[11] and Wilson 2007[12] by in their studies.

Regarding parity, most of our patients had 3-5 kids (64.76%).12 patients were nulliparous (11.42)%. In a study by Rasheed M Saleh, bacterial vaginosis was present 45.5% in nulliparous as compared to 15.4% in multiparous women, so bacterial vaginosis might be cause or effect of bacterial vaginosis.[13]

Preterm labour and Pre PROM were present in 39.04% and 28.57% respectively. According to Leitich and others bacterial vaginosis is a risk factor for preterm delivery.[14,8]

PID is taken as a complication of BV. In our study, it was found to be 64.76%. According to Catherin L Haggerty at el BV and anaerobic bacteria are associated with endometritis even independent of N Gonorrhea or C Trachomatis.[15]

Midtrimester miscarriage, low birth weight were present in 27.61% each and jaundice in 23.80%. In a cohort study by Pippa oaskesholt and at el in a low risk cohort at 10 weeks gestation was not a strong risk factor for preterm delivery although it was associated with second trimester miscarriage.[16]

Cervical changes were present in 36.19% in our BV positive patients. A study by Discacciati MG and at el, BV is associated with increased odds for prevalence and incidence of HPV as well as delayed clearance.[17]

In this way BV, PID, STD, IUCD use, PTL, PRE_ PROM, elective termination of pregnancy, endometriosis, low birth weight, neonatal jaundice are associated with bacterial vaginosis.

So BV, colonization of vagina by an altered vaginal flora, although not an infection is an important gynecological condition. It is a nuisance for ladies. As it is easy to diagnose and treat so women should get routine screening and treatment to prevent complications.

CONCLUSION

Vaginal discharge is the commonest presentation in gynecology clinics and bacterial vaginosis is one of the commonest cause. Despite its association with different complications and adverse pregnancy outcomes, its fishy smell is an embarrassing for ladies. As it is easy to diagnose and treat, so screening of all women attending gyne and Antenatal OPD is advised to reduce this risk and associated complications.

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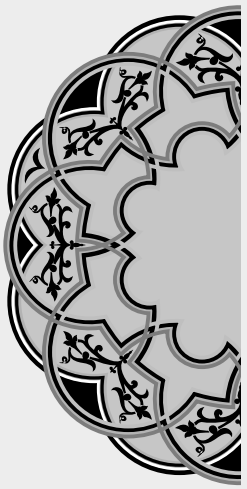

"The smallest deed is better than the greatest intention."

John Burroughs

AUTHORSHIP AND CONTRIBUTION DECLARATION

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