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Original Article

Complications among pregnant women with Vaginal discharge-100 cases

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Abstract

Background: Pregnant women commonly develop increased vaginal discharge which may lead to pregnancy complications like abortions, premature birth, low birth weight and other morbidities. This study conducted to determine pregnancy complications and sociodemographic status of pregnant women attending in the Department of Gynae & Obs, North Bengal Medical College & Hospital, Sirajganj. **Materials and Methods :** The cross-sectional descriptive study was conducted in North Bengal Medical College & Hospital, Sirajganj. The study period was from 01st may' 2016 to 30th April' 2017. All women with spontaneous or prompted complaints of vaginal discharge with pregnancy with or without other symptoms attending out patient and in patient department were enrolled into the study after obtaining informed consent. **Results :** The mean age was found 27.3±9.5 years, 27(27.0%) patients were nullipara, 43(43.0%) were para I and 30(30.0%) were para 2 or more. All (100.0%) patients had discharge, 47(47.0%) had itching, 25(25.0%) had odor and 3(3.0%) had burning. About 19(19.0%) patients had hypertension, 41(41.0%) patients had diabetes, 35(35.0%) had depression, 24(24.0%) had anemia, 19(19.0%) had threatened abortion, 17(17.0%) had threatened premature labor, 40(40.0%) had urinary infection and 39(39.0%) had hospitalization. **Conclusion :** All patients had vaginal discharge, other symptoms was found itching, odor and burning. It may lead to pregnancy complications like depression, anemia, threatened abortion, threatened premature labor, urinary infection and hospitalization.

Key words : Delayed recovery, Hyponatremia, Assessment, Diagnosis, Treatment, Early recovery.

Introduction

Pregnant women commonly develop increased vaginal discharge which may lead to pregnancy complications like abortions, premature birth, low birth weight and other morbidities.¹ Abnormal vaginal discharge in a pregnant woman causes discomfort and increases risk of complications. Management of such patient is difficult as the physician will need to distinguish leucorrhoea of pregnancy from pathological vaginal discharge and also to decide on the drugs to prescribe that are not contraindicated in pregnancy.² Vaginal yeast infection refers to irritation of the vagina due to the presence of opportunistic yeast of the genus *Candida* (mostly *Candida albicans*). About 75% of women will have at least one episode of vaginal yeast infection during their lifetime.³ Of the approximately 150 species of the yeast *Candida*⁴ known more than 20 can cause infection in humans.⁵ *Candida albicans* is the most important species among the other clinically significant species, including *C. glabrata*, *C. parapsilosis*, *C. krusei* and *C. dubliniensis*. *Candida*

spp. lives commensally on the skin and in the genitor-urinary tract and gastrointestinal tract. They are harmless in their human host when they do not overgrow and interrupt the human immune system.⁶ However, under certain conditions, some species exploit the host environment and cause disease. Superficial infection affects mucous membranes and skin, whereas invasive candidiasis can be acute or chronic and can affect the bloodstream and internal organs.⁴ *Candida* can be found in the oral cavity (oral candidiasis), the gastrointestinal tract (including the esophagus and gallbladder), at bronchial venous catheter sites, and in skin lesions.⁷

Materials and Methods

This cross-sectional descriptive study was carried out in North Bengal Medical College & Hospital, Sirajganj. The study period was from 01st may' 2016 to 30th April' 2017. All pregnant women with vaginal discharge with or without other symptoms, attending

out patient and in patient department were enrolled into the study after obtaining informed consent. After being routinely examined by the medical officer according to the national guidelines using the syndromic approach, the women were seen by the research doctor. Subjects were interviewed about their marital, educational, and

occupational status using a standardised structured questionnaire. Sexual, obstetric, and gynaecological histories were taken and details of the current genital tract complaint were noted. Each patient received a full gynaecological investigation including speculum examination and bimanual palpation.

Results

Table I: Age distribution of the patients (n=100)

Age (years)	Number of patients	Percentage
≤20	12	12.0
21-30	49	49.0
31-40	36	36.0
>40	3	3.0
Mean±SD	27.3±9.5	

Out of 100 patients, majority 49(49.0%) patients belonged to age 21-30 years. The mean age was found 27.3±9.5 years (Table I).

Table II: Education status of the patients (n=100)

Education status	Number of patients	Percentage
Illiterate	9	9.0
Primary	17	17.0
Secondary	45	45.0
Degree and above	29	29.0

Regarding educational status, it was observed that majority 45(45.0%) of the patients were completed secondary education level (Table II).

Table III: Distribution of the patients by parity (n=100)

Parity	Number of patients	Percentage
Nulli	27	27.0
Para 1	43	43.0
Para 2 or more	30	30.0

Table III shows 27(27.0%) patients were nullipara, 43(43.0%) were para I and 30(30.0%) were para 2 or more.

Table IV: Distribution of the patients by obstetrics history (n=100)

Obstetrics history	Number of patients	Percentage
Abortion	23	23.0
Planned pregnancy	35	35.0
Oral contraceptive use	53	53.0
At least 6 prenatal visits	39	39.0
Vaginal discharge in previous pregnancy	29	29.0
1 st trimester	23	23.0
2 nd trimester	77	77.0

Regarding obstetrics history of the patients, it was observed that abortion was found 23(23.0%), planned pregnancy was 35(35.0%), oral contraceptive use was 53(53.0%), at least 6 prenatal visits 39(39.0%), vaginal discharge in a previous pregnancy was 29(29.0%), 1st trimester pregnancy was 23(23.0%) and 2nd trimester was 77(77.0%).

Table V: Distribution of the patients by symptoms (n=100)

Symptoms	Number of patients	Percentage
Itching	47	47.0
Odor	25	25.0
Burning	3	3.0

Table V shows 100(100.0%) patients had discharge, 47(47.0%) had itching, 25(25.0%) had odor and 3(3.0%) had burning.

Table VI: Distribution of the patients by risk factors (n=100)

Risk factors	Number of patients	Percentage
Hypertension	19	19.0
Diabetes	41	41.0
Depression	35	35.0
Anemia	24	24.0
Threatened abortion	19	19.0
Premature labor	17	17.0
Urinary infection	40	40.0
Hospitalization	39	39.0

Table VI shows 19(19.0%) patients had hypertension, 41(41.0%) patients had diabetes, 35(35.0%) had depression, 24(24.0%) had anemia, 19(19.0%) had threatened abortion, 17(17.0%) had premature labor, 40(40.0%) had urinary infection and 39(39.0%) had hospitalization.

Discussion

In present study out of 100 patients, majority 49(49.0%) patients belonged to age 21-30 years. The mean age was found 27.3 ± 9.5 years. Altayyar et al.⁸ study observed that the highest prevalence of vaginal infections in this study was noted among the age groups 16–25 years [44.4%], followed by 26–35 age group [34.9%] and 36–45 age group [20.6%]. This observation is consistent with Sehgal et al.⁹ reported that, a 54% incidence rate within age bracket 20 - 30 years in Northern Nigeria. da Fonseca et al.¹⁰ study observed that 49.9% patients belonged to age up to 19 years, 46.3% patients belonged to age 20-29 years and 32.1% belonged to age 30 or more. Lima et al.¹¹ study observed that the pregnant women studied herein were mostly young adults with ages in the age range 20-29 years (48.0; 46.2%, mean $\pm$ SD: 23.7 ± 6.6) years.

In present study showed 27(27.0%) patients were nullipara, 43(43.0%) were para I and 30(30.0%) were para 2 or more. Lima et al.¹¹ study reported regarding obstetric data, multiparous were predominant (58; 55.8%), with reports of up to 13 pregnancies. da Fonseca et al.¹⁰ study showed para 0 was found 45.4%,

para 1 was 38.4% and para 2 was 45.6% and para 3 and more was 37.2%. Regarding obstetrics history of the patients, it was observed that abortion was found 23(23.0%), planed pregnancy was 35(35.0%), oral contraceptive use was 53(53.0%), at least 6 prenatal visits 39(39.0%), vaginal discharge in a previous pregnancy was 29(29.0%), 1st trimester pregnancy was 23(23.0%) and 2nd trimester was 77(77.0%). Lima et al.¹¹ study observed that the most of them reported never having aborted (81; 77.9%) and not becoming pregnant after sexual contact with their first partner (57; 54.8%). Slightly more than half of them were in the 2nd trimester of pregnancy (58; 55.8%), with 20.2 ± 7.4 weeks of gestation. da Fonseca et al.¹⁰ study observed abortion was found 45.9%, planned pregnancy was 40.1%, oral conceptive use was 42.7%. At least 6 prenatal visits was 43.0%, vaginal discharge in a previous pregnancy 84.5%. Reporting vaginal discharge in a previous pregnancy was the strongest predictor of vaginal discharge in the current pregnancy showing a PR twice as high (PR 2.26, 2.02; 2.54). This association was also demonstrated in a 2007 study.¹²

In current study 47(47.0%) had itching, 25(25.0%) had odor and 3(3.0%) had burning. In study of Altayyar et al.⁸ observed that discharge was found 86.0%, itching 49.0%, odor 27.5% and burning 12.0%. Lima et al.¹¹ study observed that on speculum examination, vaginal discharge was identified in all pregnant women (104; 100%). In current study, it was observed that 19(19.0%) patients had hypertension, 41(41.0%) patients had diabetes, 35(35.0%) had depression, 24(24.0%) had anemia, 19(19.0%) had threatened abortion, 17(17.0%) had threatened premature labor, 40(40.0%) had urinary infection and 39(39.0%) had hospitalization. da Fonseca et al.¹⁰ study showed that hypertension was found 43.9%, diabetes was 45.3%, depression was 55.5%, anemia 49.3%, threatened abortion 48.6%, threatened premature labor 52.1%, urinary infection 54.2%, and hospitalization 52.9%. This study found that depression was present in 55% of samples with vaginal discharge. Depression rates are higher in women attending gynecological clinics, and qualitative studies have demonstrated a strong relationship between vaginal discharge, psychosomatic symptoms, and stress.¹³ Anemia was significantly associated with

vaginal discharge during pregnancy. Half of the women who had anemia reported vaginal discharge. This finding is corroborated by another study with pregnant women. The high prevalence of abnormal vaginal discharge in this population shows the need to examine this relationship in greater depth in order to prevent occurrence.¹⁴ Threatened premature labor was significantly associated with pathological vaginal discharge during pregnancy. Just over half (52%) of women who reported threat of preterm labor complained of vaginal discharge. In this study, premature labor occurred in 15% of subjects. An infectious cause is seen in about 40% of cases of spontaneous premature labor.¹⁵ STIs have been associated with adverse pregnancy outcomes including premature birth and low birth weight—both major determinants of infant morbidity and mortality especially in developing countries where neonatal intensive care is available only in very few centers.¹⁵ This study showed that urinary tract infection reported during pregnancy was strongly associated with vaginal discharge, a finding that is corroborated by other studies.¹² There is growing evidence supporting that genital infections during pregnancy increase the risk of urinary tract infection which is a major risk factor for premature birth and a leading cause of neonatal death.¹⁶ It clearly shows the importance of early diagnosis and appropriate management of vaginal discharge to reduce infant deaths.

Conclusion

Vaginal discharge may lead to pregnancy complications like depression, anemia, threatened abortion, premature labor, urinary infection and hospitalization. Screening protocol incorporation with routine antenatal checkup for early diagnosis of vaginal discharge and its treatment is recommended.

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