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A study on prevalence of vaginal candidiasis in pregnancy at a tertiary hospital

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Abstract

Vulvovaginal candidiasis is common presenting feature in pregnant women attending antenatal clinic with symptoms of pruritis, vaginal discharge, erythema, splash dysuria. Diagnosis is based on per speculum examination and discharge being taken for Gram stain and culture which is used for diagnosis. Vaginal candidiasis is more common in third trimester and in multigravidas, associated with pregnancy complications of Abortion, preterm labour and congenital candida infection, this indicates it should be diagnosed early and treated to prevent such catastrophe.

Methodology and Results: It was prospective study carried over a period of one year. 200.

Patients were included in this study, prevalence of vaginal candidiasis in our study was 40%. It was more in multigravidas and more in 3rd trimester of the symptoms most common symptom was vaginal discharge noted in 100% of patients.

Conclusion: Because of adverse pregnancy effects of candida it needs early diagnosis and treatment.

Keywords: Vaginal candidiasis, pregnancy, tertiary hospital

Introduction

Vulvovaginal candidiasis is a condition characterised by increased growth of candida in vagina and its signs and symptoms include intense pruritis, flash dysuria, curdy vaginal discharge and erythema [1, 2]. It has been seen that about 70% of females experience at least one episode of candida infection in their lifetime and 50% of them suffer from recurrent attacks [3-5]. Which is characterised by four or more episodes in a year.

Candida albicans is a part of lower genital tract flora in 50% of asymptomatic women [6]. The pathogenesis for *Candida* infection is alternation in host immune response. Some of the conditions associated with increased chances of *Candida* infection are; diabetes insipidus, long term use of oral contraceptives, prolonged antibiotic use, pregnancy, immune suppressive conditions like HIV, patients on chemotherapy (Lanchares and Hernandez 2000:Guiot, *et al.* 1994) Our study is focussed to study the prevalence of vaginal candidiasis in pregnancy. Increased chances of vaginal candidiasis in pregnancy is based on following; during pregnancy there is increase in oestrogen levels which acts on glycogen in vaginal epithelial cells that is also increased resulting in formation of more and more lactic acid so that vaginal pH falls to about 3-4 during pregnancy all these changes prevent the growth of pathogenic organisms but on the hand this reduced pH favours the growth of *Candida albicans* that thrives in acidic pH (Plitteri Adele 2007). Incidence of vaginal candidiasis is more in third trimester than 1st Or 2nd trimester and is more in multigravidas than primigravidas Since vaginal candidiasis has adverse fetomaternal effects Like miscarriage, preterm labour, congenital candida infection [7]. So it needs early screening in pregnancy and early treatment.

Methodology

It was a prospective study carried out in the tertiary hospital of SKIMS Soura over a period of one year from year March 2017-to February 2018. A total of 200 pregnant patients were included in the study.

Inclusion criteria

1. Pregnant patients with symptoms of pruritis, curdy discharge, and splash dysuria.
2. Pregnant patients in 1st, 2nd and 3rd trimester.

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Exclusion criteria

1. Patients who had intercourse during past 24 hours
2. Patients taking antibiotics during past 7 days.

Patients presenting with signs and symptoms were subjected for Per speculum examination and a high vaginal swab was taken using cotton tipped swabs for gram staining and KOH mount, Culture was done on sabourads medium.

Results

Total no. Of pregnant women included in the study= 200

No. Of patients with vaginal candidiasis = 80

Prevalence of vaginal candidiasis= 40%

Table 1: Distribution of patients according to age

Age	No. of Patients	Percentage
18-20yr	5	6.25%
20-30yr	60	75%
30-40yr	15	18.75%

Table 2: Distribution of patients according to parity

Parity	No. of patients	Percentage
Primigravida	20	25%
Multigravida	60	75%

Table 3: Distribution of patients according to trimester of pregnancy

Trimester	No. of patients	Percentage
1 st trimester	10	12.5%
2 nd trimester	20	25%
3 rd trimester	50	62.5%

Table 4: Distribution of patients according to signs and symptoms

Pruritis	40 patients	50%
Curdy discharge	80 patients	100%
Splash dysuria	20 patients	25%
Vaginal erythema	10 patients	12.5%
Dysparunia	10 patients	12.5%

Discussion

Vaginal candidiasis is most common distressing symptom in Pregnancy causing great morbidity in form of abortions, preterm Labour [7] prevalence of vaginal candidiasis in our study was 40%. High prevalence is shown by study of oyemole *et al.* 70% [8] another study by parveen *et al.* showed prevalence of 38% [9]. Low Levels of candida albicans has been reported in study of New York [10]. The common symptoms of vaginal candidiasis in our study pruritis, erythema, splash dysuria, curdy discharge, similar to study by Hilalgo and Eckert *et al.* [11, 12] In our study Vaginal candidiasis was more common in age group 20-30 years and was more in multigravidas than primigravidas, similar to study by omar *et al.* [13] Vaginal candidiasis in our study was more common in 3rd trimester, similar findings were seen by Limia and XU and Sobel [14, 15]. The most common complaint in our study was curdy vaginal discharge (100%). The method of diagnosis for vaginal candidiasis in our study was combined Gram stain and culture.

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