Study of Risk Factors for Infectious Vaginitis in Reproductive Women

Neetu Singh¹, Jyotsna Singh²

ABSTRACT
Introduction: Vaginal infection is most common gynaecological problem in females especially in their reproductive age group. Infection of female genital tract results from vaginal flora, extraneous agent and sexually transmitted disease. The study aims to access risk factors of infectious vaginitis in reproductive females.

Material and methods: A Prospective study carried out on females of age group 15-49 years, diagnosed with infectious vaginitis in Obs-Gynaecology Department, Ramprakash Gupta Memorial Mother and Child Referral Center, DRRMLIMS Lucknow.

Results: Total 100 women were enrolled in the study. Maximum were literate, married and from rural background. Maximum females (75%) had a history of using cloth napkins during their menstruation, 36% had history of previous reproductive tract infections. Risk factors such as pregnancy, use of oral contraceptives were commonly present 10%, 15% respectively.

Conclusion: Vaginal infection is are most common cause of vaginitis. Awareness programme and hygiene practice are needed for education and to decrease the consequences of vaginal infections.

Keyword: Infectious Vaginitis, Risk Factors, Reproductive Females

INTRODUCTION
The complaint of abnormal vaginal discharge is common among women in the reproductive age. Vaginal discharge may be due to physiological or pathological condition. Vaginal discharge that differ in odor, color, consistency or significantly decrease or increase in amount, may be due to an underlying problem like an infection. Vaginal infections are one of the most common gynaecological problem in women of reproductive age group. Causes for vaginal infection may be bacterial vaginosis, candidiasis, trichomoniasis, or in combinations. Candida albicans is responsible for most episodes of vulvovaginal candidiasis, a very common condition that affects up to 75% of women at least once in their lifetime. Trichomoniasis is the most common non viral sexually transmitted disease, caused by parasite protozoan Trichomonas vaginalis with an estimated 170 million cases occurring worldwide each year. Vaginitis may also involves imbalance in normal flora or pH of vagina, unhygienic practices, improper care during menstruation, pregnancy, diabetes, oral contraceptives pill use, immunodeficiency and occasionally hormonal and allergic factors¹

WHO estimated that there are more than 340 million new patients of sexually transmitted infections every year and 75-85% of them from the developing countries and lead to severe complication on the women health.

The aim of our study was to assess the risk factors contributing vaginitis in women of reproductive age group.

MATERIAL AND METHODS
This was a prospective, observational and descriptive type study. It was conducted in department of Obs-Gynaec, Dr Ramprakash Gupta Memorial Mother and Child referral center, DRRMLIMS, Lucknow from August 2017 to August 2018. The target population was reproductive aged females with age group between 15-49 years who were diagnosed with infectious vaginitis. A random selection was done. Inclusion criteria include females with Infectious vaginitis in age group between 15-49 years. We excluded females with cognitive impairment and those who did not give their consent freely. All relevant clinical information such as patient demographic profile, socioeconomic variables, risk factors were collected by questionnaire based study. Questionnaire includes information regarding patients’ income, occupation, education status, complaints along with risk assessment such as presence or absence of STD, previous infection of reproductive tract. Diabetes, pregnancy, oral contraceptive use and information concerning sexual hygiene were collected.

RESULTS
A total of 100 patients were assessed in study. Maximum patients (50%) were of age group of 25-35 years. Among all patients maximum were married (85%) and belonged to rural areas (75%). Their literacy ranging from primary schooling to post graduate studies (88%) while 12% were illiterate. Literacy status lower than higher secondary education level was 44%. In this study maximum patients (76%) were unemployed. Majority of patients had low income status. (Table-1)

Table (2) shows that maximum patients had a practice of using cloth napkins (washed, sundried and reusable) during their menstruation and 36% of them had previous infection in reproductive organ. (13%) were oral contraceptive users. (12%) had history of recent antibiotic or steroid users. (12%) were pregnant and (6%) had diabetes mellitus. Habit of

¹Associate Professor, Department of Obstetric and Gynaecology, ²Senior Resident, Department of Obstetric and Gynaecology, Dr Rammanohar Lohia Institute of Medical Science, Lucknow, India

Corresponding author: Dr Neetu Singh, Associate Professor, Department of Obstetric and Gynaecology, Dr Rmlims, Vibhuti Khand, Gomti Nagar, Lucknow, UP, India


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In India, adolescent and women particularly of rural areas mostly use the plain cloth napkins which were wased, and reused multiple times for subsequent cycles rather than hygienic disposable pads available in market. Some studies support the that unhygienic menstrual management practice corresponds to increased risk of bacterial vaginosisis.6,9 Baisley K et al3 found in their study that bacterial vaginosis is important risk factor in female facility workers in north western Tanzania. Das P et al6 also reported menstrual hygiene practices and risk of urogenital infections in women in their study. Our study reflects that majority of females with infectious vaginitis had practice of using cloth napkins. This may have contributed to vaginitis due to the variety that reused cloth napkins may not be well sanitized because of improper cleaning by people with low socioeconomic groups and rural areas. This findings coincides with studies related to menstruation hygiene in India.4,7 History of previous infections was the second most common risk factor. This may be due to improper medication or previously unrecognized complication. Similarly Carr et al (1998) reported evaluation and management of vaginitis in their study.3 Other risk factors like pregnancy, use of contraceptive, recently antibiotic/steroids use, sexually transmitted disease, diabetes and hygienic issues. This results coincides with findings reported by Mascarenhas et al (2012).9 Explanation regarding its basis includes that pregnancy induces environmental and hormonal changes and reduce immunity to fight infections. Diabetes alters host defence, steroid and antibiotics may weaken immune system. Oral contraceptive can change the vaginal flora, pH and estrogen level which may contribute infections. (Table-2).

CONCLUSION

Infectious vaginitis is the most common complain of reproductive women. Based on present study result, use of cloth napkins during menstruation has the potential risk factors for infectious vaginitis. The study recommends that there are large need of creating awareness and educational programmes regarding reproductive health so consequences of vaginitis can be reduced and hence to reduce morbidity.

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REFERENCES

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