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Sexually Transmitted Infections of Viral Aetiology: A Rising Trend

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Abstract

Background: Sexually transmitted infections (STI) are a major health problem affecting the quality of life and causing serious illness and death. With increasing urbanization and large migrant population in urban areas, the incidence of these infections is increasing. In recent years, viral STI are increasing in incidence. There is need to increase awareness regarding viral STI for the effective implementation of preventive and control measures.

Aims & Objectives: Aim and objective of this study was to identify the emerging trends of viral STI and to study the prevalence of viral STI in a tertiary health care center.

Material and methods: This retrospective study was conducted at dermatology OPD at a tertiary care centre in NCR. All the patients diagnosed with STI of viral aetiology over a 15-month period from September 1, 2021, to November 30, 2022, analysed on the basis of clinical records, were included in our study.

Results: A total of 50 patients were diagnosed with sexually transmitted infections.

Male : Female 31:19 Out of this 38 were of viral aetiology (76%). The most common STI affected age group was 26-35 years, and the most common viral STI noted was molluscum contagiosum, followed by condyloma acuminata and herpes genitalis in both the genders.

Conclusion: At present viral STIs show an upward trend, whereas bacterial STIs such as syphilis, lymphogranuloma venereum, and gonorrhoea demonstrate a declining trend.

Keywords: STI, Viral, Molluscum Contagiosum, Herpes Genitalis

1. Introduction

Sexually transmitted infections (STIs) are the most common among notifiable diseases [1]. STIs are more dynamic than other diseases prevailing in the community. HIV infection, a global pandemic has affected the approach to the treatment of STIs very significantly, as the most important mode of HIV transmission is sexual, and the STIs also play a facilitative role in the acquisition and transmission of HIV. In recent years, there has been a decline in incidence of STI of bacterial aetiology and there is increasing incidence of STI of viral and fungal aetiology [2]. This is because of the widespread use of antibacterial antibiotics, self-medication, and treatment through national program [3].

2. Materials and Methods

Case records maintained in the STI proforma of patients visiting the outpatient department (OPD) of our tertiary care centre were retrospectively studied from period 1st September 2021 to 30th November 2022 (15months). Prior consent was taken. Information recorded was demographic details including name, sex, and marital status, clinical history, and history of exposure (frequency and last exposure). Examination findings regarding nature of ulcer/lesion, lymphadenopathy were recorded. VDRL, anti HCV, anti HbsAg, HIV screening HSV 1&2 antibody were routinely done for all patients after due counselling and consent, Syndromic and clinical diagnosis was made on the basis of clinical features and laboratory investigations. Treatment was provided to the patient as per NACOs guidelines. Data was compiled and tabulated.

3. Results

50 patients were diagnosed with sexually transmitted infection, male: female – 31:19.

38 patients (76%) were of viral aetiology [table 1], male: female 22:16. Most common viral STI diagnosed was Molluscum contagiosum in 24 patients (63.15%) [Table 2].Condyloma acuminata and herpes genitalis were diagnosed in 7 patients.

There were 16 unmarried and 22 married patients. 32 patients gave history of unsafe sexual practices (unprotected contact, multiple sexual partners). This included all unmarried patients and 16 out of 22 married patients gave history of extramarital contact. 6 patients did not volunteer history of unsafe sexual practices. All patients reported heterosexual contact, no patients volunteered history of homosexual contact. Educational status - only 2 patients were graduates, 27 patients were school dropouts, 9 patients had completed higher secondary education. All patients were in unskilled /semi-skilled jobs or home makers. Most patients were in 26-35 years age group (42.1%) followed by 16-25 years (31.5 %). Youngest patient was 19 years old male. [Table 3] Concurrent STI - One patient of genital molluscum contagiosum was HIV positive. 2 patients of Condyloma acuminata were seropositive for IgG for Herpes Simplex virus. One patient of genital molluscum contagiosum was VDRL positive.

4. Discussion

There is a decline in the number of new STI cases in recent times, a common observation in various government health facilities [4] which could be attributed to the better preventive, diagnostic and management facilities by active NACO intervention. The prevalence of AIDS is 0.21% as per latest reports of NACO [5]. Out of the various categories of diseases, there was a significant variation in the prevalence of bacterial and viral STIs, with viral STIs dominating. There was a gradual increase in prevalence of viral STIs over a period of 7 years which was 29.8% in the year 2007–2008, 31.3% in the year 2008–2009, 32% in the year 2009–2010, 39.7% in the year 2010–2011, 38.6% in the year 2011–2012, 46.5% in the year 2012–2013, and 47% in the year 2013–2014. This dissimilarity in bacterial and viral STIs in this study period of 7 years, was attributed to interplay of various factors such as free availability of antibiotics, self-medications, and syndromic approach adopted by private practitioners as well as government health centers. The trend of STIs is changing from bacterial to viral diseases as suggested by other studies [2, 5, 6]. In a retrospective 5-year study done in Davangere, Karnataka by Anirudh *et al*, viral STI affected 49.51 % of patients followed by fungal (28.8%) and then bacterial (22.63%). Most common viral STI was Herpes genitalis [2]. In previous studies candidal balanoposthitis and herpes genitalis were the most common STI [9]. In another study, the most prevalent viral STI was herpes genitalis (42.86%) followed by condyloma acuminata (26.37%, $n = 24$) [9, 10]. Though the prevalence of bacterial STIs/RTIs was less (chancroid-1.1%), there was evidence of a resurgence of syphilis (8.8%). In another study, HG was the most common STI, with the incidence of 21.75% which was at par with other studies [7, 11, 12]. In our study, genital molluscum contagiosum was the commonest diagnosis followed by herpes genitalis and condyloma acuminata. More than one STI can be present concurrently as seen in our study. Viral sexually transmitted infections go unreported as they are asymptomatic or mildly symptomatic and self-limiting. Also, patients of STI avoid seeking medical care for fear of stigma and self-treat on advice of unregistered practitioners. However, these STI increase the risk of transmission of HIV and other STI. It is important to educate and increase awareness regarding these diseases. Prevention of these STI by partner notification and early diagnosis and treatment will decrease the HIV burden. Increasing awareness about them will lower the incidence of unsafe sexual practices. The measures to improve partner notification are urgently required for both cure and the prevention of STIs and to limit the spread of HIV.

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