

Incidence of Skin Manifestations and Std (Sexually Transmitted Diseases) Cases In HIV Patients

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Abstract

Introduction: Diseases of skin and mucous membranes are common clinical manifestations of acquired immunodeficiency syndrome (AIDS). Cutaneous disorders are not only associated with terminal immunodeficiency, but also occur throughout the course of human immunodeficiency virus (HIV) infection.

Materials and Methods: Study was done from 1st January 2019 to 30th September 2019 for 9 months. HIV patients coming to D.V.L. Department, MBNR Govt. Medical College, with different skin and STD problems were registered. They were evaluated taking history symptoms and signs.

HIV patients present with skin manifestations and STD infections at various stages of the disease.

Results: Most of the skin infections occurred when the CD₄ count 50 to 150. Skin manifestations & STD infections occurred with 6 months to 3 years of taking ART treatment. 72% are agricultural laborers with extramarital history.

Conclusion: Skin manifestations can arouse suspicion of HIV infection in otherwise healthy patients. They can serve as a dependable marker of HIV infection. Awareness of the varied pattern of these manifestations would help in the early diagnosis and management of HIV infection, thereby decreasing the morbidity and improve the quality of life in them.

Key Words: AIDS, HIV, CD₄, STD

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I. Introduction

Diseases of skin and mucous membranes are common clinical manifestations of acquired immunodeficiency syndrome (AIDS). Cutaneous disorders are not only associated with terminal immunodeficiency, but also occur throughout the course of human immunodeficiency virus (HIV) infection. More than 90% of patients develop skin lesions at some time during the disease.¹ In some patients, skin is the first organ affected. Skin diseases have proved to be sensitive and useful measures by which HIV progression can be monitored.² Impaired skin immune system occurring early in HIV disease is believed to be responsible for the frequent occurrence of both infectious and non-infectious skin diseases even before the development of full blown HIV infection.³ Although skin lesions may be seen in the general healthy population, their occurrence in HIV infected patients is often atypical and more severe, explosive, extensive or resistant to therapy. The unusual histology of some of the diseases in AIDS may contribute to misdiagnosis.⁴ Thus, proper histological diagnosis of skin manifestations is very important as it may serve as the earliest manifestation to suspect a case of HIV infection. Infectious agents can produce skin lesions even though the classic organ of involvement for that the agent does not include the skin.⁵

II. Materials And Methods

Objectives

To study the local pattern of Skin manifestations and STD in people living with HIV infection.

Study Design: Clinical observational study.

Setting: Dermatology, Venereology and Leprosy Department of a Tertiary Care Hospital attached to a MBNR Govt. Medical College, Mahboobnagar.

Duration of the Study: 1st January 2019 to 30th September 2019 for 9 months.

Patients: 229 patients (n=229) having HIV/AIDS were included. The following criteria were used.

Inclusion Criteria: All patients who are positive for HIV 1 or 2, as detected by ELISA or other tests were included in the study. Patients of all age groups and sexes were included.

Exclusion Criteria: Nil

Study was done from 1st January 2019 to 30th September 2019 for 9 months. HIV patients coming to D.V.L. Department, MBNR Govt. Medical College, with different skin and STD problems were registered. They were evaluated taking history symptoms and signs.

Detailed history was elicited including pre/extramarital unprotected sexual exposure, onset, evolution and duration of skin lesions, treatment history etc. Complete general physical, systemic and cutaneous examinations were carried out and findings recorded in a proforma. CD4 count and any other relevant tests (eg: skin biopsy) were done. The WHO clinical stage and CD4 count of each patient were noted.

HIV patients present with skin manifestations and STD infections at various stages of the disease.

Total 229 patients presented to the D.V.L. Department.
Male – 106, Female – 123. Their CD₄ count was noted.
Duration of symptoms taken. Examination done.

- 1) Skin manifestations – 125,
- 2) STD cases – 104
presented to the D.V.L. Department. Investigations done.

- Skin:**
- 1) Pzanck Test – in cases of Herpes infection.
 - 2) HSV Antibodies – for Herper.
 - 3) Scrapings for fungal elements – in case of Tinea corporis.

- STD:**
- 1) Vaginal discharge examination for trichomonas and candidiasis.
 - 2) VDRL – for syphilis.
 - 3) Gram stain for gonococcal infection.

III. Results

S.No	Gender	No of patients
1	Male	106
2	Female	123
3	Total	229

Table 1: Gender Distribution

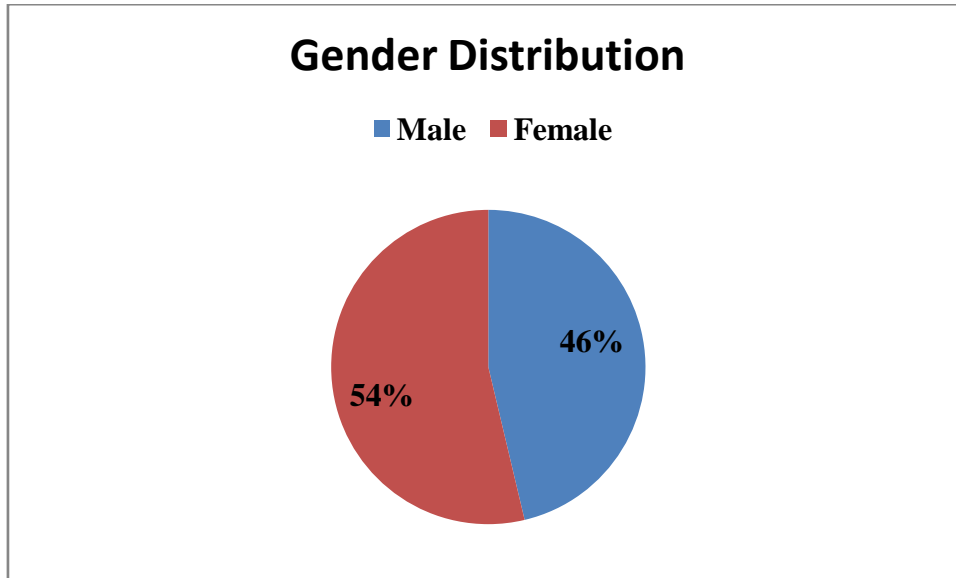


Figure 1: Gender distribution

S.No	Skin Manifestations		Number of patients
1	Fungal infections (20)	Tinea corporis	16
		Tinea Pedis	4
2	Bacterial infections	Staphylococcus-impetigo	15
3	Viral infections (26)	a) Herpes labialis	13
		b) Herper Zoster	5
		c) Molluscus contagiosum	3
		d) Viral warts	5
4	Pruritic Papules of HIV		28
5	Papulo Squamous Disorders	Seboerrhic dermatitis	5
		Psoriasis	2
6	Drug Rash to ART (Anti retroviral treatment)		15
7	Miscellaneous	a) Vitilago	3
		b) Scabies	11

Table 1: Pattern of Skin Manifestations in HIV Patients

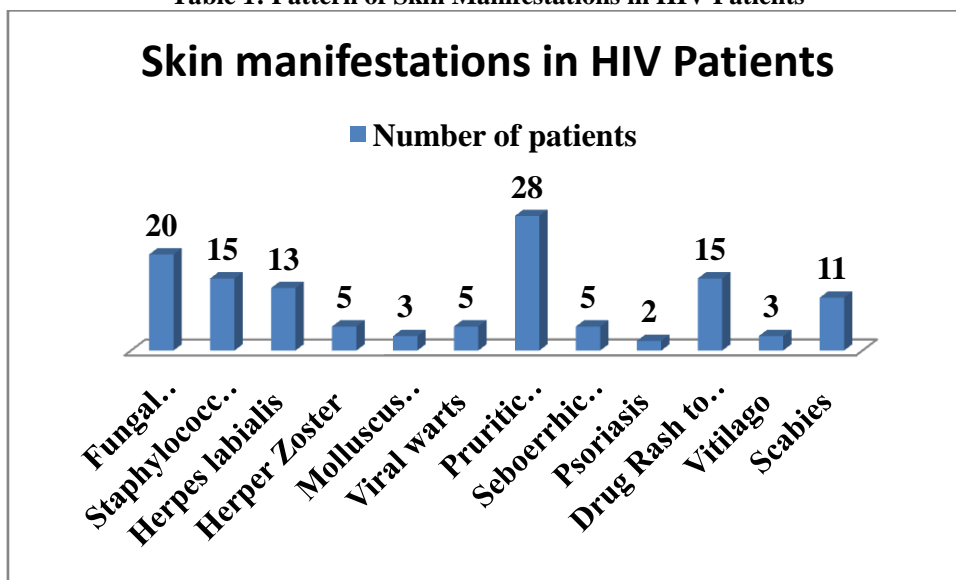


Figure 2: Skin Manifestations in HIV Patients

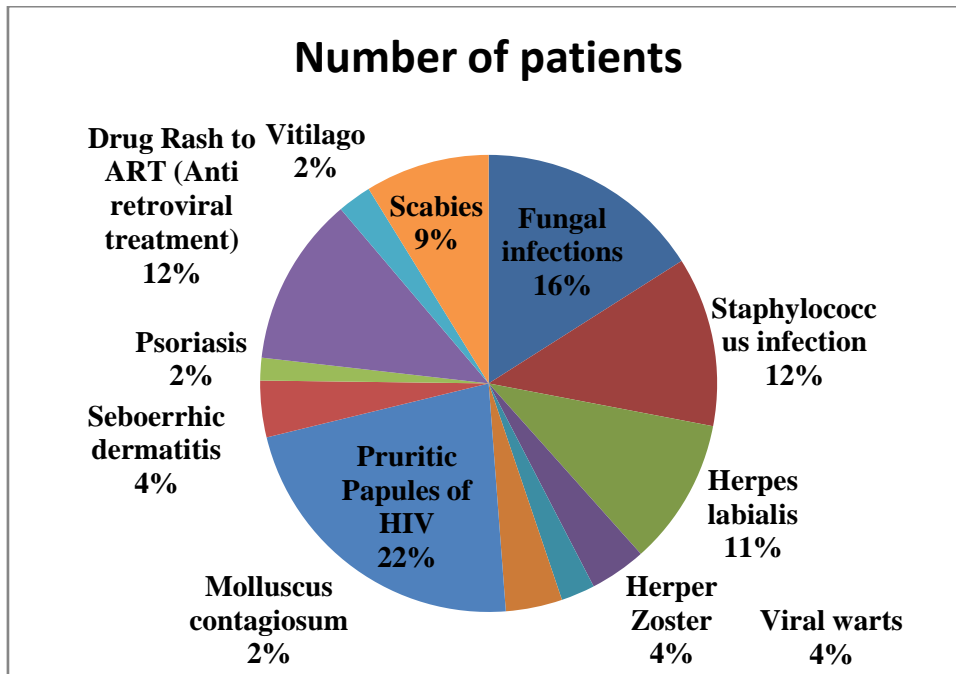


Figure 3: Pie diagram of Skin Manifestations in HIV Patients

S.No	Oral Manifestations	Number of patients
1	Candidiasis	8
2	Herpes Simplex	6

Table 2: Pattern of oral Manifestations in HIV Patients

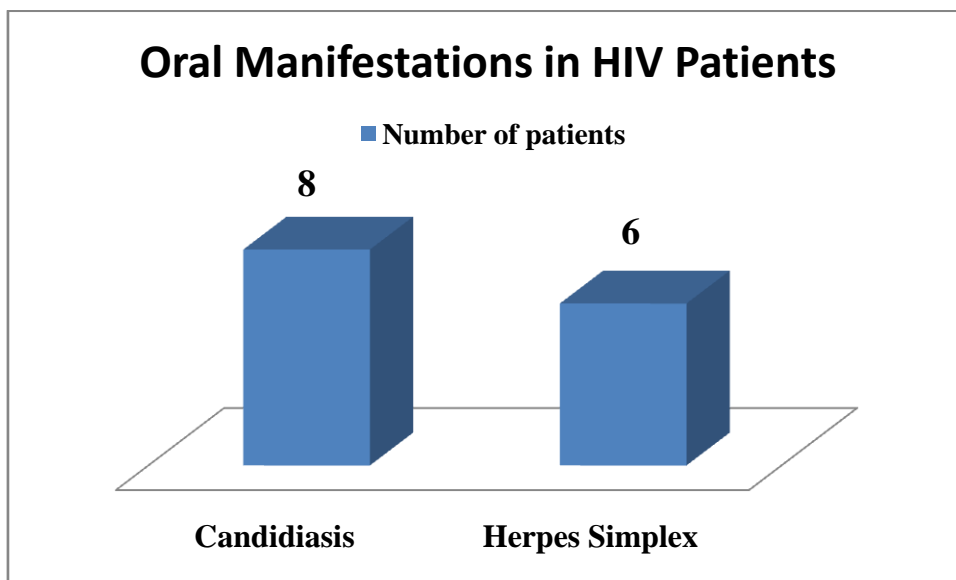


Figure 4: Oral Manifestations in HIV Patients

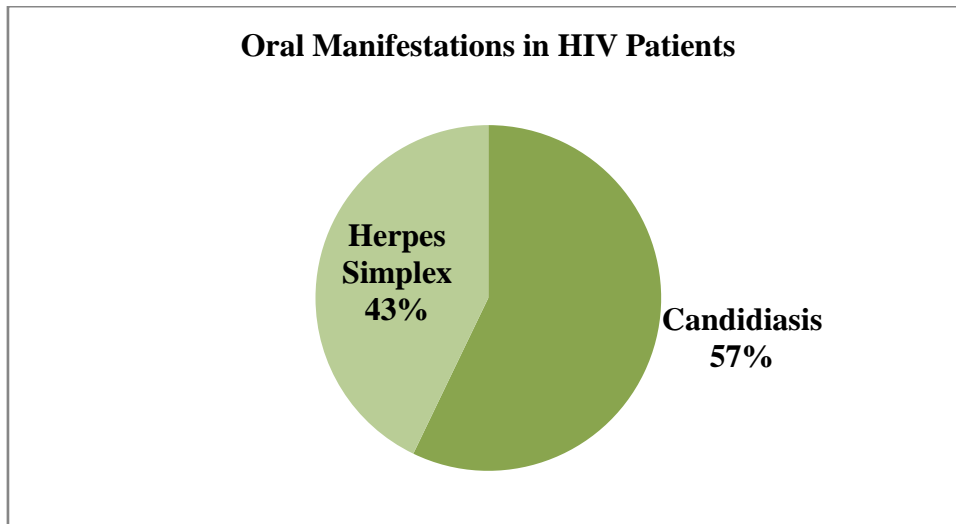


Figure 5: Pie diagram of Oral Manifestations in HIV Patients

S.No	Sexually Transmitted Diseases	Number of patients
1	Gonococcal urethritis	24
2	Vaginal-Trichomoniasis	28
	Candidiasis	16
3	Chancroid	6
4	Herpes genitalis	17
5	Syphilis	1

Table 6: S.T.D. (Sexually Transmitted Diseases) in HIV patients

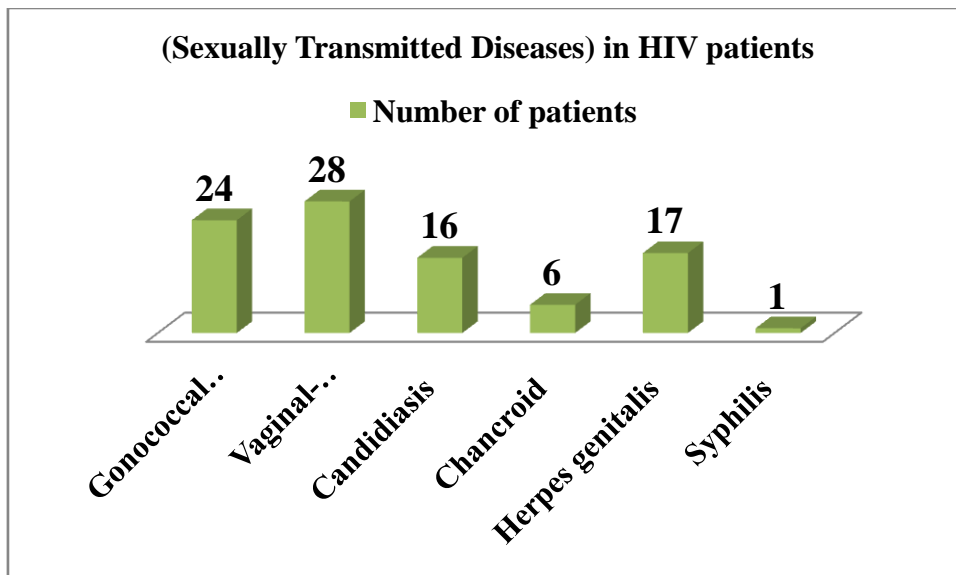


Figure 4: (Sexually Transmitted Diseases) in HIV patients

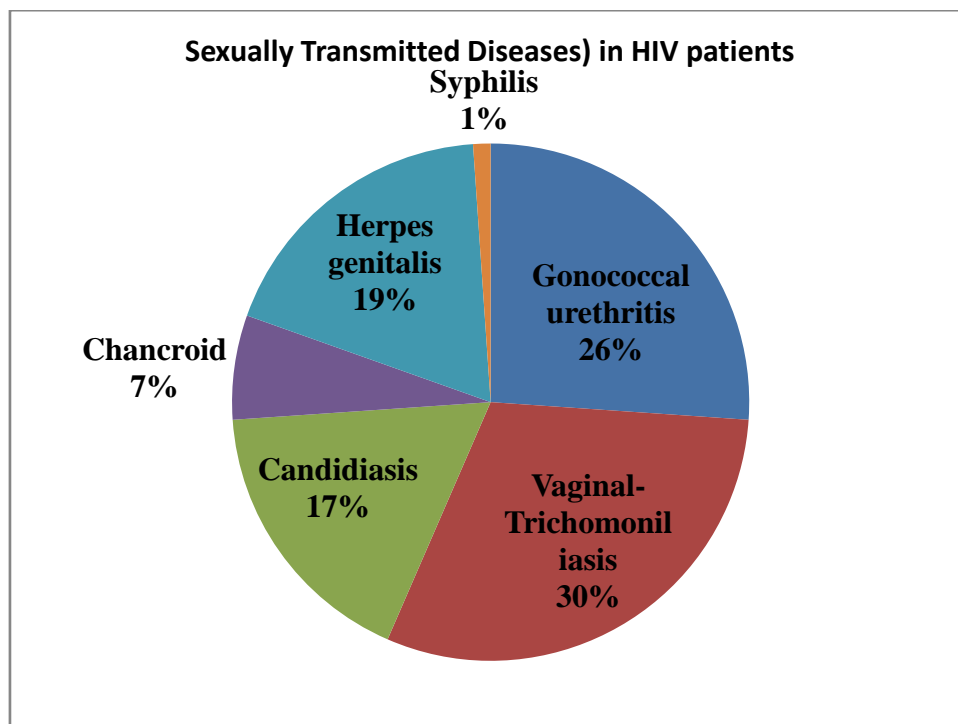


Figure 7: Pie diagram of (Sexually Transmitted Diseases) in HIV patients

- Most of the skin infections occurred when the CD₄ count 50 to 150.
- Skin manifestations & STD infections occurred with 6 months to 3 years of taking ART treatment.
- 72% are agricultural laborers with extramarital history.

IV. Discussion

During the nine months study period from 1st January 2019 to 30th September 2019, 229 patients were seen. Male patients were 103, females patients were 123. This could be attributed to our socio-cultural factors as females are more conservative and they acquire HIV mainly through their spouses except for few.⁷

Skin manifestations were seen in 41.92.4% patients and they presented with either one or multiple skin problems. Overall, Pruritic Papules of HIV was the most prevalent mucocutaneous manifestation seen in 28 patients. This finding is consistent with previous studies by Wang J et al, Huang X et al, Munoz-Perez MA et al, Akinboro AO et al and Murugesh SB et al. Pseudomembranous type of oral candidiasis was the commonest seen in 11.4% followed by erythematous 6.2% and angular cheilitis 1.7%.⁸ The next common infection seen was dermatophytosis in 17.4% patient. The presentation of dermatophytosis was extensive and onychomycosis was seen in 2.3%, the marker of HIV, proximal subungual onychomycosis was not seen in this study. Extensive pityriasis versicolor was seen in 1.1%.⁹

Among the viral infections, Herpes labialis) infection was the commonest seen in 13 patients followed by Herper Zoster in 5 patients. Similarly, Molluscus contagiosum was the commonest sexually transmitted infection seen in 5 patients and Viral warts in 5 patients.

Pyodermas, follicular and non-follicular, which were recurrent, persistent and more resistant to treatment, requiring higher doses of antibiotics for prolonged period occurred in 6.8% of patients in our study. Other bacterial infections seen were scrofuloderma and primary chancre.

Scabies was seen in 11 patients, the presentation was widespread sparing the characteristic areas and refractory to treatment, but crusted scabies was not seen in this study.

Viral Sexually Transmitted Infections (STIs) were common than the bacterial STIs, Vaginal Trichomoniliasis Candidiasis seen in 4% and Gonococcal urethritis in 24 patients.

Rare and unique dermatological markers of HIV-infection and AIDS defining conditions like cryptococcosis, penicilliosis, histoplasmosis, Kaposi sarcoma, etc. were not seen in this study.

Various studies on the prevalence of dermatological manifestations of HIV were done in the past. This study was done to reemphasize the need for complete mucocutaneous examination and to have a high degree of suspicion and counsel the patients with common typical or atypical, and uncommon skin problems for voluntary HIV testing, thus facilitating in early diagnosis and management, thereby delaying the immunosuppression and improving the quality of life.¹⁰

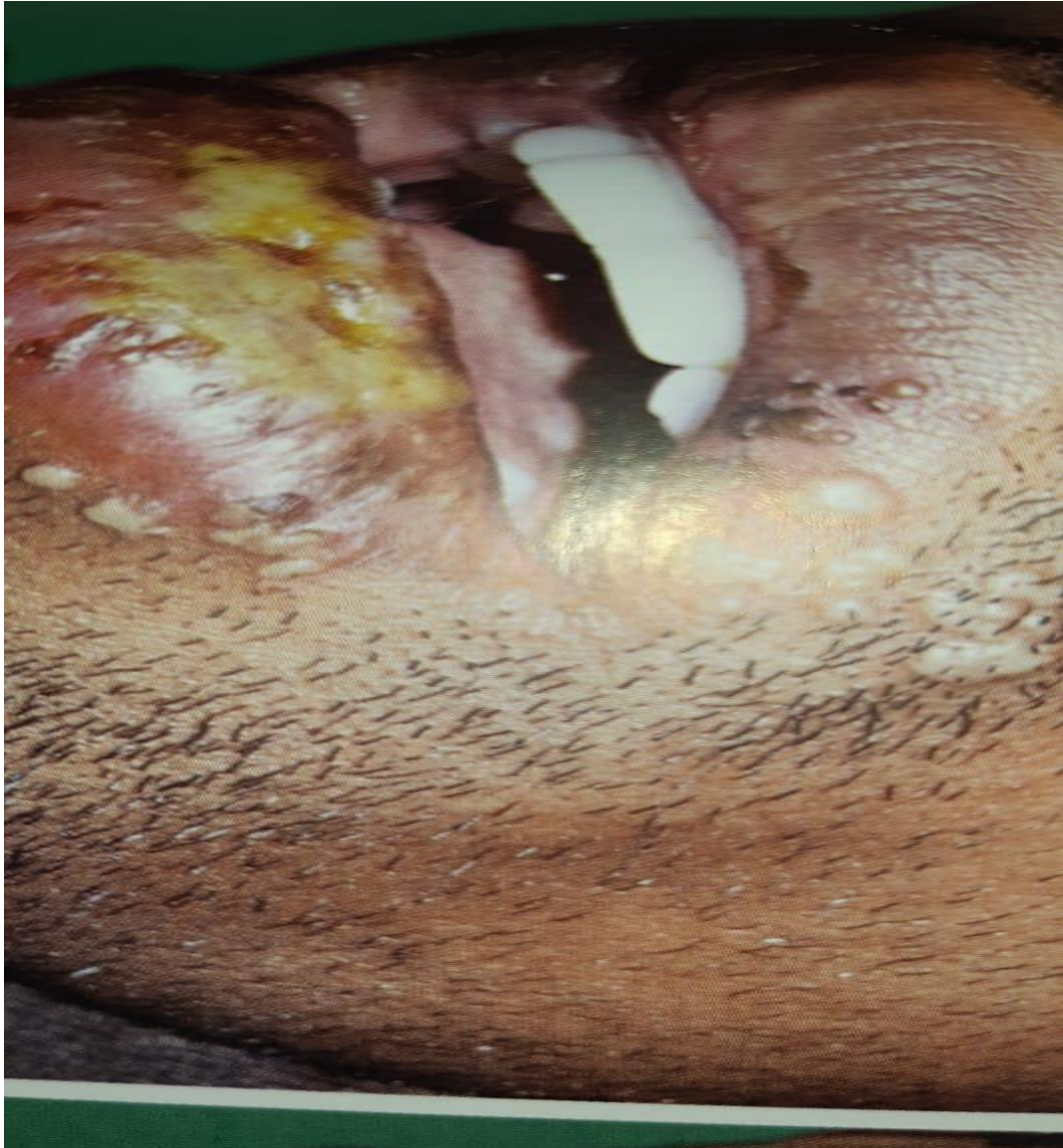


Figure 1: Herpes labialis



Figure 2: Viral Warts



Figure 3: Molluscum contagiosum



Figure 4: Tinea corporis





Figure 5: Drug rash due to ART

V. Conclusion

Skin manifestations observed more in females than males, Males – 106, Females – 123. (Total 229 patients), Youngest age is 27 years, Highest age is 58 years. SKIN – Pruritic papules of HIV with highest incidence – 28, Least incidence psoriasis – 2. STD – highest – Gonococcal urethritis – 2, Least incident syphilis - 1.

Skin manifestations can arouse suspicion of HIV infection in otherwise healthy patients. They can serve as a dependable marker of HIV infection. Awareness of the varied pattern of these manifestations would help in the early diagnosis and management of HIV infection, thereby decreasing the morbidity and improve the quality of life in them.

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