International Journal of Pathology; 2004; 2(2):75-77

A Clinical Experience with Patients of Syphilis

Syed Afaq Ahmed, Riaz A Sheikh and Ikram–ullah Khan

Department of Dermatology, Pakistan Institute of Medical Sciences, Islamabad.

Twenty five consecutive cases of Syphilis presenting to the dermatology department of Pakistan Institute of Medical Sciences, Islamabad, were reviewed regarding the clinical pattern of presentation, laboratory findings and their response to treatment. Other associated sexually transmitted diseases were also looked for and HIV status was also determined. Most of the patients responded well to penicillin and those not responding were adequately treated with erythromycin. Patients' age ranged from 10 to 70 years; most of the patients were clustered between 20 to 40 years. There were 22 males and 3 female patients. Following clinical signs were seen in the patients: Body Rash with particular involvement of the face, palms, soles and genitalia, oral and other mucous membrane lesions, hair loss, lymphadenopathy and condylomata lata.

Key words: Syphilis; Sexually Transmitted Disease (STD).

Introduction

Sexually Transmitted Diseases (STDs) have been a problem with mankind since ages. Their incidence has risen because of changing social "norms" and the society becoming more promiscuous. Syphilis is one such STD, which is also known as a great imitator since it presents itself in a wide variety of cutaneous and systemic manifestations. It may also be associated with other sexually transmitted diseases.

The wide variety of syphilitic manifestations includes syphilitic chancre, generalized body rash, condylomata lata, mucous membrane lesions, alopecia, lymphadenopathy and systemic manifestations.[1, 2] Chancres may be genital or extra genital, single or multiple. Roseolar rash is transient and usually not noticed. It is usually macular. Papule is the basic lesion of secondary syphilis.[3] However the lesions may be in the form of plaques, annular lesions, lichenoid, pityriasiform or rarely vesicular, pustuloulcerative or necrotic. Usually rash is skin colored or coppery red and non itchy.[4]

Oral lesions may be ulcerative[5], or in the form of mucosal patches and sometimes chronic lesions may present in the form of leucoplakia.[6] Tertiary cutaneous lesions may present in the form of nodules or gummata[7], but these lesions are hardly seen nowadays because of increasing use of antibiotics for other diseases.

Systemic manifestations may present with eye manifestations, lymphadenopathy, and hepatosplenomegaly.[8] There may be neurological, cardiovascular or other systemic involvement.

Present study has been carried out to highlight the mode of presentation, pattern and manifestations of syphilis in our population.

Patients and Methods

Patients of syphilis belonging to all ages and both sexes were included who presented to the dermatology department, PIMS in the past five years. Inclusion criteria were positive serology for syphilis with or without cutaneous manifestations. Serological tests done were Venereal Disease Research Laboratory (VDRL) and Treponema pallidum haemagglutination (TPHA) tests. Those patients who had positive VDRL but negative TPHA, collagen vascular disease or any other active infectious disease, which could produce rash, were excluded from the study.

In all the patients, clinical manifestations and modes of presentation were recorded in a proforma. The clinical and serological response of the patients to penicillin &/or erythromycin was observed.

Results

A total of 25 cases were included in this study. There were 22 males (88%) and 3 females (12%) with a male to female ratio of 7.3:1. Age of the patients ranged from 10 to 70 years. Youngest patient was a girl aged 10 years. Patients ranging

Syphlitic Oral Lesions in Another Patient Ulcerations and Mucus Patches

Syphlitic Lesions on Hand

Condylomata Lata

Syphlitic lesions on Trunk

from 10 to 20 years were five. Maximum patients belonged to 20-40 years of age which were 15. Patients from the range of 40-50 years were four. One patient was 70 years old. The serology (VDRL and TPHA) was positive in all cases (100%).

As shown in table 1, maculopapular lesions, lymphadenopathy, oral lesions and post-inflammatory pigmentation were common lesions. Condyloma lata were observed in 20%. Macular lesions, infiltrated lesions (Mycosis fungoides type) and hair loss were observed in 12% each. Lymphadenopathy was generalized in 64% and localized (1-3 groups of lymph nodes enlarged) in 16% of cases. Hair loss was moth-eaten type in 2 and alopecia areata in one patient.

Table 1: Clinical Presentation in 25 Cases of Syphilis

Clinical Features	No. of Cases	%age
Maculopapular Lesions	19	76
Oral Lesions	09	36
Macular Lesions	03	12
Infiltrated Lesions	03	12
Hair Loss	03	12
Post-inflammatory Pigmentation*	10	40
Lymphadenopathy	20	80
Condylomata Lata	05	20

* Dark ground illumination could be done in only 3 cases and was positive in all of them.

Seventeen patients gave positive history of contact; 5 of them told easily and from rest of the patients positive history was extracted with difficulty.

Twenty three (92%) patients responded well to penicillin; 2 patients who showed reaction to penicillin were treated with erythromycin and they responded well. None of the patients was sero-positive for HIV.

Other venereal diseases were seen in 4 patients; 1 had gonorrhea and 3 had herpes simplex.

Discussion

Syphilis is on the rise as we have seen more patients of this disease in past five years. 80% of our patients had a chancre or history of chancre, which is almost similar to the frequency seen in western world.[1, 2] We did not see extra genital chancres in these patients. It might have been due to less sexual aberration. We also did not see multiple chancres. Secondary syphilides were noticed in all the patients.[3] We did not see vesicular, pustular, ulcerative or necrotic lesions in our patients. None of the patients complained of pruritis, though according to some studies it has been seen in 8-42% cases.[4] However this frequency of pruritis is more common in black and immunocompromised patients. Macular lesions were seen in 12%, which is comparable to 10% seen in previous studies.[3]

We observed maculopapular lesions in 76% of patients, which is comparable to 22-77% in some other studies.[9] Distinctive brown red macules and papules on palms and soles are very helpful in diagnosis.[3] In our patients post inflammatory pigmentation was present in 40%. We did not see any patient with hypo pigmentation which has been quite commonly observed before e.g. necklace of Venus.[10] Condylomata lata are part of the papular syphilides. We saw mucoid patches and ulcerations in 36% which is a little more than the 20% prevalence in previous studies.[5] It might have been because of the local presentation pattern. Getting positive sexual history has always been a problem because of our social, cultural and religious background. Most of the patients responded well to penicillin, which is a good sign.[11, 12] Rest of the patients responded to erythrocin.[11] HIV was fortunately negative in all the patients, but we should always be on the guard regarding all the patients of STDs.[9] They should always be screened for HIV because of its increasing incidence in our population as well. Last but not the least any patient of one sexually transmitted disease must be screened and checked for other venereal diseases. Incidence of other STDs in our

patients was 16%.[13]

Conclusion

Incidence of syphilis in our population is low but on the rise and one should always be vigilant to look for this disease whenever we come across a patient with generalized rash, mucous membrane involvement, alopecia of non cicatricial type and multi system involvement. Red brown or dark maculopapular lesions on the palm and soles are quite helpful in diagnosis. Contact must be checked and treated particularly when they are one of the family members.

References

1. Chapel TA: The variability of syphilitic chancres. Sex Transm Dis 1978; 5: 68.
2. Tucker HA: Mulhern JL: Extra genital chanres, a review of 219 cases .Am J Syph Go nor Vener Dis 1948; 32: 364.
3. Chapel TA: Physician recognition of sign and symptoms of secondary syphilis. JAMA 1981; 246: 250.
4. Allyn B: Pruritis in syphilis. Arch Dermatol 1977; 113: 1295.
5. Fiumara NJ and Berg M: Primary syphilis in the oral cavity. Br J Vener Dis 1974; 50: 463.
6. Musher DM: Syphilis. Infect Dis Clin North Am 1987; 1: 83.
7. Graham WR and Duvic M: Nodular secondary syphilis. Arch Dermatol 1982; 118: 205.
8. Goens JL, Janniger CK and deWolf K. Dermatologic and system manifestations of syphilis. Am Fam Physician 1994; 50; 1013-20.
9. Martin DH and Mrockzkowski TF. Dermatologic manifestations of sexually transmitted diseases other than HIV. Infect Dis Clin North Am 1994; 8: 533-82.
10. Fiumara NJ, Cahn T Leukoderma of secondary syphilis: Two case reports. Sex Transm Dis 1982; 9: 140.
11. Flumara NJ, Diagnosis and treatment of infectious syphilis comp Ther. 1995; 21:639-44.
12. Rolfs RT, Treatment of syphilis, Clin Infect Disease 1995; 20(suppl 1): S23-S38.
13. Thomas DL and Quinn TC. Serologic testing for sexually transmitted diseases. Infect Dis Clin North Am 1993; 7: 793-4.