

## LEUCOMELANODERMA — A DIAGNOSTIC SIGN OF SYPHILIS

B. M. S. BEDI AND S. ARUNTHATHI

### Summary

Study of 35 cases of Leucomelanoderma showed that all of them were of syphilitic origin. 4 of these cases belonged to congenital syphilis and 31 belonged to late syphilis of acquired type. The lesions have occurred mainly on the palms in large majority of the cases. The V.D.R.L. test was repeatedly and persistently positive in all these cases. It has been attempted to emphasize the role of leucomelanoderma occurring on the palms or occasionally over the soles as an important diagnostic sign of syphilis.

Osler the great physician pointed out "know ye syphilis and all things clinical shall be added on to you". The age old maxim embodies a gem of wisdom. This is particularly true in case of syphilitic cutaneous manifestations which are so varied and misleading that they are liable to be missed unless and until one entertains a high degree of suspicion.

Pigmentary or depigmentary cutaneous changes are quite a rare feature of syphilis. Mal del Pinta may also produce leucomelanoderma pinta as reported by Gaiind and Tutakne<sup>1</sup>. The classical syphilitic dyschromias in the form of leucoderma coli as described on the sides or back of the neck or the clavicular region in dark haired women Willcox<sup>2</sup>, is hardly seen these days. Syphilitic leucomelanoderma in the form of reticulated pigmentation interspersed with depigmentation on the various parts of the body is also so uncommon that it is often mistaken with the other pigmentary changes of the skin and

treated that way. However we in our earlier publication (Baswani et al<sup>3</sup>), drew attention to the frequent occurrence of syphilitic leucomelanoderma on the palms and soles. We have subsequently seen quite a number of such cases who only present with the chief complaint of discolouration over the palms and soles. These cases on further investigation were all found to be of syphilitic origin.

### Material and Methods

A total of 35 cases were thus seen who were investigated on the following lines :

1. History of exposure
2. Clinical evidence of syphilis
3. Repeated V.D.R.L. tests
4. Skin scrapings for Dark Ground Examination
5. Biopsy

The age and sex distribution of these cases are given below in Table I :

TABLE 1

Age in year	Male	Female	Total
1 — 10	1	—	1
11 — 20	1	—	1
21 — 30	4	4	8
31 — 40	5	7	12
41 — 50	4	6	10
51 upwards	3	—	3
	18	17	35

The number of cases showing the involvement of palms and soles or both is outlined below :

Both palms	24
Both palms and both soles	6
Both soles	2
One palm and one sole	2
One palm only	1
Total	35

Most of the cases had noticed the condition during the last three years. The duration of the leucomelanoderma is outlined below :

Duration	No. of cases
0 — 1 year	11
2 — 3 years	12
4 — 5 years	4
10 years and above	8
Total	35

The skin scrapings done for some of the cases for Dark Ground Examination were negative for treponemes. The biopsy in most of the cases was of no diagnostic significance showing non-specific variable histology. The C.S.F. examination was done in all the cases. Only 15 cases out of 35 (42.8%) gave some suggestion of having suffered from some type of venereal disease in the past either by giving history of genital ulcer or scar of healed ulcer.

The only persistent finding seen in all these cases was the positive V.D.R.L. test done repeatedly. The relative dilution of positivity is outlined below :

1 in 1	2	Dilution	1
1 in 4	4	„	4
1 in 8	8	„	5
1 in 16	16	„	10
1 in 32	32	„	8
1 in 64	64	„	5
1 in 128	128	„	1
1 in 256	256	„	—
1 in 512	512	„	1

There were 4 cases of congenital syphilis, as diagnosed by the clinical signs of frontal bossing depression of the bridge of the nose, Hutchinson teeth and ARP pupil in 2 patients. However 2 out of these were brothers.



Fig. 1



Fig. 2

Photographs I to II illustrate the clinical manifestations of syphilitic leucomelanoderma.

Amongst the rest there were 5 cases where we could find clinical and serological evidence of syphilis in the corresponding spouse.

## Discussion

Study of 35 cases showed that Leucomelanoderma was the only presenting manifestation in all of them. However in 15 out of them we could get some suggestion either in the form of history or clinical examination of these having had venereal disease in the past. There was no other evidence of active primary or secondary stage of syphilis in any of them. The scrappings for Dark Ground Examination were negative and the Biopsy for histo-pathology was of no diagnostic help. In all these cases the blood V.D.R.L. was positive. Clinically they could only be placed under the late syphilis. Although Leucomelanoderma is usually seen in Acquired Syphilis, yet we in our study could come across 4 cases who were of congenital syphilitic type. As there has been some confusion for placing this feature at proper stage of syphilis, it is

now generally agreed to be of late Syphilis (King Abrose<sup>4</sup>, Marshall<sup>5</sup>, Stokes<sup>6</sup>). The manifestation in congenital Syphilitics further corroborates this view. In majority of the cases, this condition is noticed in the palms. In 33 out of 35 cases, the palms of the hands were involved. In 24 cases, it was on both the palms. Since this is not a very often described site, it has been thought worthwhile to document these findings. The study is revealing the great value of leucomelanoderma as a diagnostic sign of late syphilis. This needs to be further looked in all cases suspected of syphilis.

## Acknowledgment

We are grateful to the Principal, Jawaharlal Institute of Post-Graduate Medical Education and Research, Pondicherry-6, for permission to utilise Hospital records and to publish this paper.

## REFERENCES

1. Gaiind ML, Tutakne MA: Mal-del-Pinta (pinta) A case report, *Ind J Derm & Vener* 34: 208, 1968.
2. Willcox RR: Text Book of Venereal Diseases and Treponematoses, William Heinemann Medical Books Ltd., London, 1964, p 192.
3. Baswani BS, Bedi BMS and Garg BR: Syphilitic Leucomelanoderma - Report of three cases, *Ind J Derm & Vener*, 32: 175 1966.
4. King Ambrose, Nicol Claude: Venereal Diseases, Cassel, London, 1964, p. 22.
5. Marshall Games: Diseases of Skin, E & S Livingstone Ltd., Edinburgh & London, 1960, p. 281.
6. Stokes JH, Beerman and Ingram NR: Modern Clinical Syphilology, W.B. Saunders Co., Philadelphia and London, 1945, p. 674.

## TRUE or FALSE ?

Hypertrichosis Laruginosa when encountered should be treated with respect as a cutaneous marker of internal malignancy.

(Answer page No. 242)