Herpes Simplex Labialis Virus is A Risk Factor for Vitiligo (Post- Herpes Simplex Labialis Vitiligo)

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ABSTRACT:

BACKGROUND:

Herpes simplex labialis is a common disease and is the major cause of erythema multiforme. Recently post-herpes labialis leukoderma had been noticed on the lips of Iraqi patients

OBJECTIVE:

The aim of the present work is to assess this new pigmentary problem.

METHODS:

A total of 24 patients with post-herpes labialis leukoderma were included in this study. Full history and a thorough physical examination were done for all patients.

RESULTS:

Fourteen females (58.37%) and 10 males (41.67%) were studied. Their ages ranged between 7-53 years. Koebner phenomenon was positive in 17 (70.83%) patients. Family history of vitiligo in close relatives was positive in 13 (54.17%) of patients.

CONCLUSION:

The findings of the present work are in favor that this type of leukoderma is a variant of vitiligo that may be induced by herpes-simplex labialis.

KEYWORDS: herpes-simplex labialis, leukoderma, lips, vitiligo.

INTRODUCTION:

Vitiligo is a common pigmentary skin disorder affecting approximately 1% of world population [(1)].

It is a multifactorial polygenic disorder with a complex pathogenesis. Although several theories have been proposed to explain the loss of epidermal melanocytes in vitiligo, the precise cause remains unknown, however considerable progress has been made over the last two decades. Theories include autoimmune, cytotoxic, biochemical, oxidant-antioxidant, neural, and viral mechanisms for destruction of epidermal melanocytes. Several studies also point to a significant role of genetic susceptibility to vitiligo. None of these mechanisms has been conclusively proven. [(2,3,4)]

Most leukodermas are diagnosed clinically following a complete history and physical examination. Histologic examination of involved skin is usually most helpful for 'inflammation-associated' hypomelanoses,such as sarcoidosis and mycosis fungoides[(5)].

Herpes simplex labialis is one of the commonest diseases throughout the world. From 20 % - 40% of the population have had episodes of herpes labialis[(6)].

The frequency of recurrent episodes is extremely variable, and in some studies, averages about once per year, [(7)] but there is evidence that the frequency and severity of recurrent HSV-1 disease decrease over time.

Herpes simplex virus is the major cause of erythema multiforme [(8,9)].

Recently we have noticed that leukoderma of the lips are commonly induced by herpes simplex labialis. So, the aim of the present work was to assess this new pigmentary problem.

PATIENTS AND METHODS:

Twenty –four patients with post-herpes labialis leukoderma were included in this descriptive case series hospital-based study.

All patients were thoroughly assessed regarding the age, sex, herpes simplex infection ,duration , recurrence, any precipitating factors, duration between herpes simplex infection of the lips and appearance of leukoderma , any treatment were received by the patients and family history of vitiligo in close relatives of the patients.

Koebner phenomenon was induced by punch biopsy on the back and watched for 1-3 months to see the appearance of leukoderma.

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Wood's lamp examination was carried out in all patients for the lips and other parts of the body.

RESULTS:

Of the cases studied 14 (58.33%) were females, and 10 (41.67%) were males. Their ages ranged between 7-53 years with a mean ± SD of 20.04 ± 9.77 years.

The age of onset ranged from 6.5-52 years with a mean ± SD of 19.25 ± 9.49 years.

Family history of vitiligo in close relatives was positive in 13 (54.17%) of the patients.

Koebner phenomenon was positive in 17 (70.83%) of patients. This phenomenon appeared after 7-10 weeks after punch biopsy.

Recurrence of herpes simplex infection occurred in 20(80.3%) patients.

The leukoderma had appeared on the same sites of herpes simplex labialis infections after 5-9 weeks. (fig.1&2)

Two cases (8.33%) of patients developed ordinary vitiligo in other parts of the body.

Eighteen (75%) patient received various types of topical treatments for this condition .

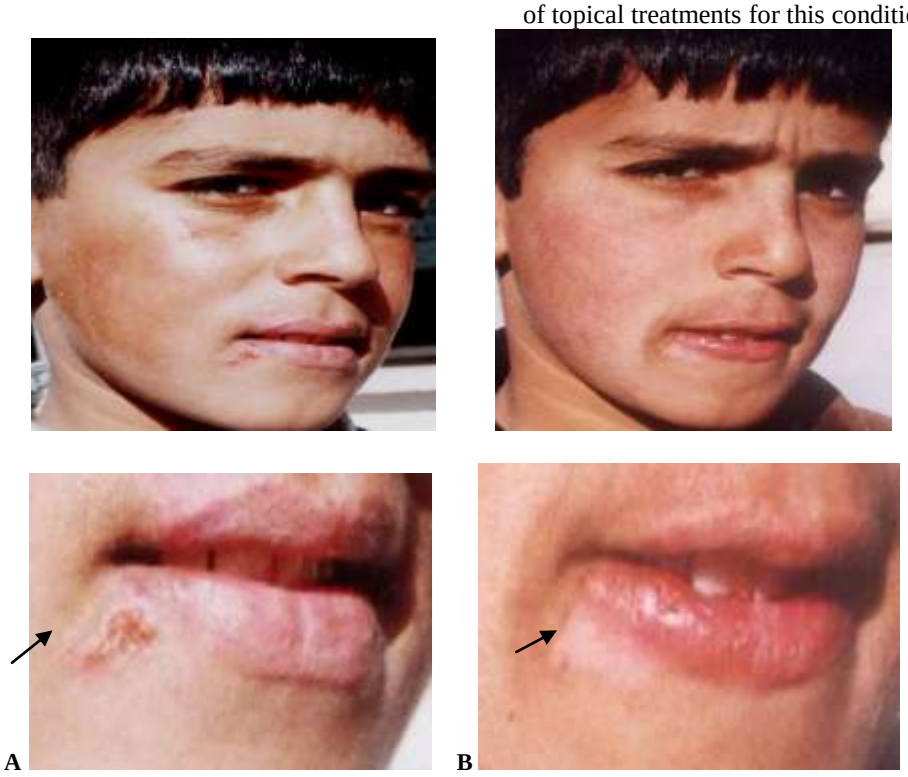

Figure 1: (a) A fourteen years old male with herpes simplex labialis .
(b)The same fourteen years old male whose develop leuckoderma 3 month after herpes simplex labialis in the same site .

Figure 2: (a) A twelve years old male with herpes simplex labialis .
(b) A ten years old female with herpes simplex labialis .

DISCUSSION:

In our daily practice, we have noticed frequently that post-herpetic erythema multiforme might leave leukoderma on healing.

Although there are several types of vitiligo; which represent the most characteristic patterns of vitiligo, namely: segmental, acrofacial, generalized, and universal, or by pattern of involvement as focal, mixed, and mucosal types [1, 2,3] .

To the best of our knowledge, post-herpetic leukoderma of the lips that frequently seen in Iraqi patients was not reported before, so herpes simplex labialis should be added as one of the initiating and triggering factors for developing leukoderma and vitiligo.

Koebner phenomenon has been reported to be positive in at least a third of vitiligo patients[2], while in our study it was positive in 70.8%; this is a confirmatory test that post-herpetic leukoderma is a variant of vitiligo.

This leukoderma, overtime might progress into ordinary vitiligo as it has been noticed in 8.3% of our cases.

Recurrence of herpes simplex labialis is a common problem [10.11]. If leukoderma follows such an event, the management of this problem will become very difficult.

CONCLUSION :

Herpes Simplex Labialis virus may point to a significant role of viral mechanisms for destruction of epidermal melanocytes and may be a risk factor for vitiligo .

This type of leukoderma is may be a variant of vitiligo that may be induced by herpes-simplex labialis.

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