IJCRR
Vol 06 issue 02
Section: Healthcare
Category: Case Report
Received on: 26/10/13
Revised on: 28/11/13
Accepted on: 05/01/14

A CASE OF LINEAR VERRUCOUS EPIDERMAL NEVUS

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ABSTRACT

Aim: The objective of the present study is to report a case of linear verrucous epidermal nevus that was seen in 18 years old female.

Place of study: This case was seen in outpatient department of dermatology at Velammal Medical College Teaching Hospital, Anuppanadi Madurai.

Period of Study: This case was studied during the month of June 2013

Case Study: A female aged 18 years came with history of islands of pigmentations over her right lower limb presence since birth. There were no islands of pigmentation in her other parts of the body. She was thoroughly examined after detailed history and relevant investigations.

Discussion: This case was well compared and correlated with available literatures.

Conclusion: This is case of congenital disorder of skin which may or may not run in the family, but has clinical importance, hence it has been reported

Keywords: congenital disorder of skin, linear verrucous epidermal nevus, islands of pigmented patches

Introduction

Linear verrucous epidermal nevus is also known as Linear epidermal nevus and "Verrucous epidermal nevus"[1]. It is lesion of the skin giving rise to verrucous skin-colored papules which may be dirty grey or brown.[2,3] When the nevus covers extensive area of the body or diffuse distribution, then it is known as Nevus, On the other hand, when there is distribution in only one half of the body, then it is known as Nevus Unis Lateralis.[2] The islands of papules when present they coalesce in the form of serpiginous plaque.[3]

Case Report

A eighteen years old female trainee staff came with history of black velvety linear lesion in the right leg gradually increased in length since birth. Intially lesion was small behind knee, which gradually became more prominent to the extent of involving thigh and leg. There was no history of discomfort, itching, redness, pain, oozing from the lesion except for the cosmetic disfigurement. There was no history of trauma.

On Examination

Islands of Hyper pigmented verrucous Lesion was present in poster lateral aspect of right thigh extending down to the leg in a serpigenous fashion. No similar complaints in the other members in the family. She had tried topical creams where verrucous lesions shaded and became flat only to recur in the similar fashion.

Discussion

Inflammatory linear verrucous epidermal nevi are skin lesions characterized histologically by hypergranulosis with orthokeratosis and parakeratosis with agranulosis. Very frequently they are raised, flakey or scabby

It is called inflammatory because, the affected region will be warmer, inflamed than the rest area of the skin.Lesion is long and thin, hence they are known as *'Linear'* Since the lesions are wart like they are known as. *'Verrucous'* .These patients are treated with C02 Laser Surgery so as to give appearance of skin as flat, smoother and more normal resurface[4,5]

Epidermal nevi are congenital malformations of skin derived from embryonic ectoderm. They are also known as Haemarthomas.According to the predominant epidermal structure involved, their clinical appearance, distribution, and the extent of their involvement, they are classified into variants[6,7] These lesions which are observed at birth or during infancy usually do not run in the family(non-familial)[8]. Prevalance rate of this congenital lesion is estimated to be 1:1000 live births. These anomalies can be associated with anomalies of musculoskeletal and central nervous system (CNS). There is documentation of oral mucosal lesions. Clinically they appear as veracious papules and plaques observed in a linear pattern following Blaschko's lines (purported embryonic lines of ectodermal cleavage). Their extent is variable may be unilateral known as Nevus Unis Lateralis or bilateral which is very extensive (ichthyosis hystrix)[9].

Inflammatory Linear Verrucous Epidermal N evus (ILVEN) is of rare variety of epidermal verrucous nevus commonly seen in females. This condition is clinically characterized by the appearance of recurrent inflammatory chronic eczematous or psoriasiform conditions which may be commonly unilateral in distribution associated with severe itching[10,11] A female patient aged 23-year-old came to Department of Oral Medicine and Radiology with the history of gums bleeding for past 6 months. There was no significant history of medical and family history.

On examination, she had scoliosis associated with shorter right foot and leg, hence she was limping There was a patch of loss of hair (alopecia) over the right fronto-parietal region of scalp. She also had papules which were dark brown in colour with severe itching. The type of distribution was linear over the right upper part of her body, also seen in the cervical region axilla,over the pectoral region (chest), back, shoulder and over the extensor surface down to up to nails of little finger and thumb The lesion were also found on the face, external ear, over the pre auricular region and extending over the right cheek. Papules were observed on the forehead, extending from the scalp adjacent to midline, linearly down to the root of the nose, right nostril, to the vermillion border of the upper lip on the right side. There was diffuse, sessile, linear papillary lesion intra orally[12] Verrucous epidermal nevi are seen in the form of circumscribed patches or in the form linear streaks or whorls occur in circumscribed patches or more often, in linear streaks or whorls following Blaschko's lines[13.] The lesions are commonly seen over the trunk, extremities, cervical region & over the face.[14] Papillomatous nevi are found in the new born children have flat velvety soft lesions, while in adolescence, they occur as hard keratotic, verruciform lesions.[14,15] The lesion colour may vary from the coloured type to brown colour. Acanthosis, orthohyperkeratosis, papillomatosis, and an expanded papillary dermis are characteristic features of verrucous epidermal nevi histologically .They can be well demarcated from the surrounding healthy normal skin They are also known as keratinocytic, epidermal nevi[15] A study was done on 167 biopsy specimens of epidermal nevi patients. The study showed in 160 out of 167 biopsy specimens, the features of verrucca was observed in 2% along with dilatation of blood vessels[16]

Present Study: Showed Linear verrucous epidermal nevus in a eighteen years old female trainee staff with history of black velvety linear lesion in the over the right leg. To start with, it was found as a small lesion behind the right knee, & gradually increased in size and attained present

size. No history of discomfort of itching, redness, pain, oozing and other signs of inflammation from the lesion. There was also no history of trauma

On examination, hyper pigmented Verrucous Lesions were found as Islands on the poster lateral aspect of right thigh extending down towards the right leg in a serpigenous fashion..There were no history similar lesions of skin in the other members of family. Topical creams were applied over the verrucous lesions, where they became flat but it has tendency to recur it again.

She had no scoliosis, no shortening of right leg, no limping, no patch of alopecia over the right fronto-parietal region of scalp. There was no distribution upper part of her body, nor in the cervical region axilla, the pectoral region (chest), back, shoulder and not over the extensor surface down to up to nails of little finger and thumb

Conclusion

The present case is of rare variety of congenital lesion of the skin which has paramount clinical importance. Hence it has been studied, compared correlated with available literatures and reported. Since this anomaly is congenital, after taking proper history and after relevant investigations, proper awareness of the skin lesion has to be given by health workers, NGOs. Health education should be given and prevention of recurrences in the community has to be encouraged. To avoid drugs during first trimester, consanguineous marriages, consumption of alchohol, and smoking has to be stressed by voluntary workers & NGOs

Acknowledgements

Our sincere thanks to our respected Chairman, Dean of RMO for allowing us to study the above case and for publishing it.

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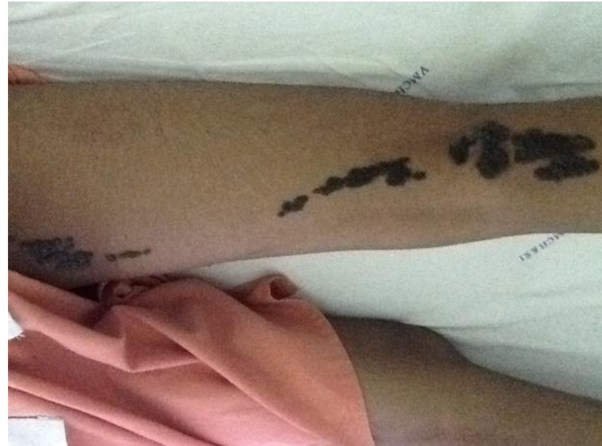
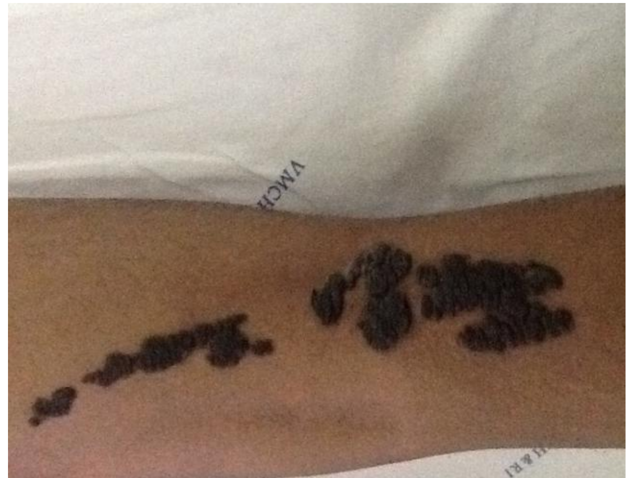


Legend -1, Islands of Hyper pigmented Verrucous Lesion was present in poster lateral aspect of right thigh extending down to the leg in a serpigenous fashion.



Legend-2, Islands of Hyper pigmented Verrucous Lesion was present over the poster lateral aspect of right thigh