

Case Report

Epidermization of lip in an adolescent: clinical appearance and dermoscopic correlation

Akshara Kharabanda^{1*}, Sudhir Kumar Singh², Anchal Kundalia²

¹Department of Dermatology, Skyn Stories, Gurugram, Haryana, India

²Sarojini Naidu Medical College, Agra, Uttar Pradesh, India

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***Correspondence:**

Akshara Kharabanda,

E-mail: Akshara5kharabanda@gmail.com

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ABSTRACT

Epidermization of lip is described as presence of a smooth, steep, leukokeratotic plaque over the lower vermilion border, blending evenly into the distal skin surface. It is a disorder of cosmetic concern. A 14-year-old girl patient came to the OPD with complaints of asymptomatic white patch on the upper lip since 1 year. A white plaque of 0.5*0.75 cm size was seen on the upper lip extending beyond the vermilion border of the lip. Dermoscopy showed multiple white to yellow dots coalescing with each other. Electrocautery was done under topical anaesthesia. The case is being reported to emphasise to highlight the role of dermoscopy as a simple, non-invasive tool that aids in confirming the diagnosis, establishing the benign nature of the lesion and providing reassurance to the patient.

Keywords: Epidermization of lip, Dermoscopy, Electrocautery

INTRODUCTION

Lips are cosmetically very important part of the face and any abnormality involving the lips is of aesthetic concern. Lips surround the oral aperture and play role in facial expression, speech and mastication. Due to their constant visibility, even small lesions involving the lips are readily noticed by the patients and may cause significantly psychological distress. This often leads to early dermatological consultation, even if the lesions are asymptomatic as lip lesions are difficult to conceal and frequently associated with fear of malignancy.¹ Anatomically lip extends from the base of the nose superiorly to the central part the mentolabial sulcus inferiorly and oral commissures laterally. The surface of the lips has four zones: hairy skin, vermilion border, vermilion and oral mucosa.² In adults the outer lip skin is thicker and contains hair, sweat glands and sebaceous glands. The edge of the lips is covered with reddish skin

called the vermilion. It is covered with a specialised stratified squamous epithelium, which is in continuity with the oral mucosa. It is partially keratinised, stratum corneum is thinner than the lip skin, rete pegs are concentrated, depth of the dermis is minimum and the reflection of blood vessels imparts a red colour.³ The vermilion border is the demarcation line that separates the vermilion lip from the surrounding skin, also called the vermilion-cutaneous junction.⁴ Epidermization of the lip or transmigration of the lip has been described as the presence of a smooth, steep, sharp leukokeratotic plaque over the lower vermilion border, blending evenly into the distal skin surface with an irregular proximal margin.⁵ It is a benign condition of the lip and is often asymptomatic. Due to its white appearance, it may mimic potentially malignant disorders such as leukoplakia. Dermoscopy can help avoid need of biopsy in typical cases.

CASE REPORT

A 14-year-old girl patient came to the OPD with complaints of white patch on the upper lip since the past 1 year. It was insidious in onset and initially a small whitish area which gradually increased in size over the last several months. There was no associated pain, itching, burning sensation, ulceration or bleeding. There was no history of preceding trauma, lip biting, application of medication or cosmetic products, systemic illness or relevant medications. No family history of similar lesions. On clinical examination a whitish plaque of 0.5 x 0.75 cm in size was seen on the left side of the upper lip extending beyond the vermilion border of the lip. Lesion was smooth, non-scaly and sharply demarcated from the surrounding mucosa. On palpation the lesion was soft, non-tender and non-indurated. No similar lesions were seen on other parts of the body. Dermoscopy was done (using dermlite DL 4) and photos were taken. Multiple white to yellow dots coalescing with each other were seen on the left side of the upper lip. There was no erythema, scaling, ulceration, erosions, atypical vascular patterns or white structureless areas. The lower lip was uninvolved.



Figure 1: Whitish to pale plaque over the vermilion border of the lip.

Histopathological examination was not done, given the classical clinical presentation, supportive dermoscopic findings and cosmetically sensitive location of the lesion. Patient was counselled about the benign course of the condition and treatment was planned primarily for aesthetic concerns. Electrocautery was done ensuring controlled ablation and minimal damage to surrounding tissue. It was done under topical anaesthesia with strict aseptic precautions. Post the procedure the patient was advised wound care and mupirocin ointment to apply twice a day for 7 days. Wound healing and cosmetic

outcome are being monitored after the procedure to look for any complications or recurrence.

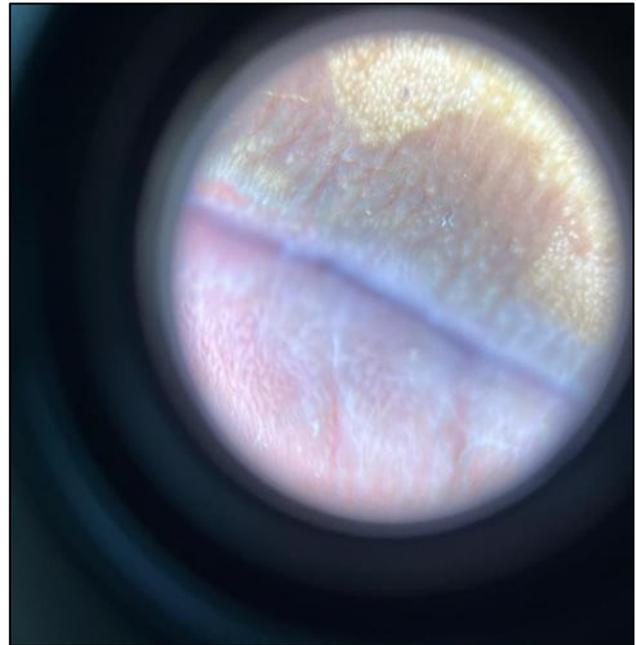


Figure 2: Multiple yellow to white dots coalescing with each other.

DISCUSSION

Epidermization of the lip has also been referred to as transmigration of the lip, as the lesion creates an appearance suggestive of normal cutaneous tissue crossing the vermilion border onto the lip mucosa. This terminology was based on the earlier belief that epithelial elements undergo transmigration at the mucocutaneous junction. However the exact etiology of epidermization of lip remains unknown.⁵ Few recent studies suggest that it results from the presence of multiple, coalescing, white to yellow Fordyce spots on the lip corresponding to ectopically located sebaceous glands without hair follicles.⁶ Lesions involving the lips are relatively common in dermatological and oral medicine practice with prevalence approximately 16-19%.⁷

Despite this epidermization of lip remains a rare entity. Hence it is important to differentiate it from other white lesions of the lip making the awareness or such benign entities essential. Differential diagnosis of epidermization of lip include leukoplakia, lip vitiligo and cheilitis. It is important to differentiate it from leukoplakia as it is a potentially malignant condition. Correct diagnosis prevents unnecessary worry, repeated biopsies or aggressive treatment. It can easily be differentiated on the basis of dermoscopy. Dermoscopy is a noninvasive diagnostic technique that permits the visualisation of morphologic features that are not visible to the naked eye, thus representing a link between macroscopic clinical dermatology and microscopic dermatopathology.⁸ Dermoscopy of leukoplakia shows white structureless

areas of irregular shapes and translucency while epidermization of lip shows coalescing yellow dots and terminal hair. Treatment options include electro cauterisation, ablation by CO₂ laser, chemical cauterisation by trichloroacetic acid or punch excision.⁵ Treatment is mainly done for cosmetic reasons or if the patient is concerned. The prognosis of this case is excellent because of its benign nature. This case adds to the existing literature of cases of epidermization of lip and reinforces the role of dermoscopy in making accurate diagnosis.

Lesions involving the lip have increased clinical relevance due to their high cosmetic and social visibility. They cause significant psychological distress, especially in adolescents and young individuals, owing to concerns related to appearance and fear of serious disease. Early recognition and appropriate reassurance is therefore essential in reducing patient anxiety.¹⁰

Limitations

The report is limited by the fact that it describes a single patient, which limits the ability to generalise the clinical and dermoscopy findings. Although dermoscopy provided valuable noninvasive diagnostic support, histopathological confirmation could not be obtained. Further studies with more number of cases and histopathological correlation will help in better characterization of this rare entity. In addition, the lack of long term follow ups limits assessment of recurrence.

CONCLUSION

Above-described case is a case of epidermization or transmigration of lips, diagnosis was made by clinical examination and dermoscopy. Patient was explained the benign nature of the disease and lesion was removed with electrocautery. This case highlights the importance of dermoscopy in avoiding misdiagnosis of Pre malignant conditions, reducing unnecessary interventions, and improving patient reassurance and satisfaction.

Early and accurate diagnosis not only prevents over treatment but also helps alleviate psychological distress associated with visible lip lesions.

Awareness of epidermization of the lip among dermatologists is essential to ensure prompt diagnosis and appropriate counselling and management of patient.

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