ORIGINAL RESEARCH PAPER
Volume - 14 | Issue - 06 | June - 2025 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

CLINICO-DERMOSCOPIC PROFILE IN ERYTHROMELANOSIS FOLLICULARIS FACIEI ET COLLI: A CASE SERIES

Dermatology

Dr. Kriti Jain Resident, Department Of Dermatology, Venereology, Leprosy, JLN Medical College & Associated Group Of Hospital , Ajmer, Rajasthan

Dr. Manish Jeph* Assistant Professor, Department Of Dermatology, Venereology, Leprosy, JLN Medical College & Associated Group Of Hospital , Ajmer, Rajasthan *Corresponding Author

Dr. Zeba Samreen Resident, Department Of Dermatology, Venereology, Leprosy, JLN Medical College & Associated Group Of Hospital , Ajmer, Rajasthan

Dr. Nisha Resident, Department Of Dermatology, Venereology, Leprosy, JLN Medical College & Associated Group Of Hospital , Ajmer, Rajasthan

Dr. Suman Kumari Resident, Department Of Dermatology, Venereology, Leprosy, JLN Medical College & Associated Group Of Hospital , Ajmer, Rajasthan

Dr. Minakshi Khichar Resident, Department Of Dermatology, Venereology, Leprosy, JLN Medical College & Associated Group Of Hospital , Ajmer, Rajasthan

ABSTRACT

Background: Erythromelanosis follicularis faciei et colli (EFFC) is a rare dermatological disorder, first described by Kitamura et al., with an unclear etiology. It presents as a triad of symmetrical reddish-brown pigmentation, erythema, and follicular papules primarily on the face and neck. EFFC is often misdiagnosed due to its subtle presentation and resemblance to other dermatoses. **Objective:** To evaluate the clinical and dermoscopic features of EFFC and highlight its diagnostic challenges and potential underrecognition. **Methods:** A cross- sectional descriptive study was conducted on 15 patients attending the dermatology outpatient department (April 2024–March 2025). Clinical data, family history, and dermoscopic findings were analyzed. **Results:** Females constituted 40% of cases. Positive family history was found in 26.6%. All patients exhibited keratosis pilaris (KP), and 20% had a family history of KP. Dermoscopy revealed consistent presence of white rosettes. **Conclusion:** EFFC may be more common than presumed. Dermoscopy enhances diagnostic accuracy, minimizing the need for invasive biopsies.

KEYWORDS

Erythromelanosis follicularis faciei et colli, Keratosis pilaris, Dermoscopy

INTRODUCTION

A significant number of dermatological conditions are diagnosed based solely on clinical evaluation, primarily due to their benign nature and the absence of definitive, noninvasive diagnostic modalities. This reliance on clinical judgment can lead to diagnostic uncertainty and varying interpretations among clinicians. Erythromelanosis follicularis faciei et colli (EFFC) exemplifies such a rare entity, often presenting a diagnostic challenge, particularly in its early stages, due to its subtle and nonspecific initial manifestations.

First time described by Kitamura et al., is a rare disorder of unknown etiology, characterized by the clinical triad of sharply demarcated bilateral and symmetrical patches of hyperpigmentation (reddish-brown pigmentation), erythema (with or without telangiectasia), follicular papules (follicular plugging) that begin on preauricular areas and cheeks and can gradually spread to the submandibular areas of the neck (in this case, the disease is called EFFC). [1]

It is not uncommon for EFFC to be misdiagnosed as other pigmentary or erythematous dermatoses. Additionally, due to the benign nature of EFFC and the aesthetic implications of facial procedures, patients frequently decline invasive diagnostic interventions such as skin biopsy. In this context, dermoscopy serves as a valuable, noninvasive diagnostic tool that can facilitate accurate identification of EFFC and help resolve diagnostic uncertainty.

EFFC is a rare disorder and hereby we are reporting aclinicodermoscopic study of EFFC in 15 patients presenting with the classical triad.

Case Series

Cross-sectional descriptive study of fifteen consecutive patients with presentation suggestive of EFFC came to dermatology, venereology, leprosy outpatient department of JLN Medical College, Ajmer from April 2024 to March 2025. After taking informed consent, patients were enrolled after taking relevant history and performing clinical examination. The main criteria for diagnosing EFFC includes the presence of hyperpigmentation, erythema, and follicular papules involving mainly the face extending to sides of the neck.

Patients who met the clinical criteria were subjected to dermoscopic examination using a handheld dermoscope (ILLUCO IDS 1100).

The age of the patients ranged from 12 to 26 years. Male predominance was seen. Disease onset was between 9 and 16 years of age and mean duration varied from 3 to 9 years. There was history of mild to moderate photosensitivity and itching in almost all patients. Clinical examination revealed the classical triad of erythema, pigmentation, and follicular papules in all patients while telangiectasias were seen in only 5 cases. Most common site of involvement was cheeks, followed by preauricular areas and extension of lesions to the submandibular area and neck in 9 patients & to temporal areas in 6 patients. Another associated feature, Keratosis pilaris that present as multiple keratotic papules with perifollicular erythema was present on upper arms, back and outer aspect of thighs in all patients, and 3 of them had positive family history for the same. Dermoscopic examination showed presence of whitish scales and numerous follicular keratotic plugs against a reddish brown background in all the patients. Gray dots were present in the perifollicular and interfollicular areas in all patients. Telangiectasias were present in 5 patients.

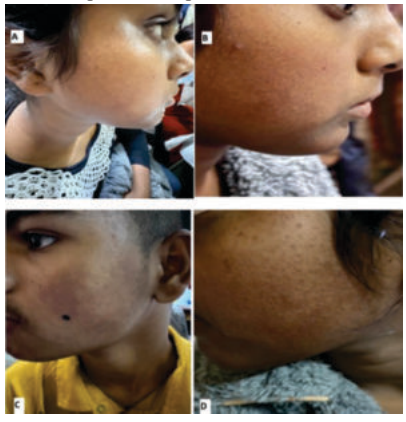

Figure 1.(A-D) : Clinical picture of Erythromelanosis follicularis faciei et colli (EFFC). Classical triad of erythema, follicular papules, and hyperpigmentation involving preauricular areas, cheeks, temporal areas extending down to neck.

Clinicodemographic profile of EFFC patients

Age/ Sex	Family history	Unilateral/ Bilateral	Itching	Photosensitivity	Keratopilaris	Erythema	Follicular papules	Treatment	
								Oral Retinoids	Topical Retinoids
12Y/M	+	B/L	+	+	+	+	+	+	+
15Y/M	-	B/L	+	+	+	+	+	+	+
17Y/M	-	B/L	-	+	+	+	+	-	+
22Y/M	-	B/L	+	+	+	+	+	+	+
25Y/M	-	B/L	+	+	+	+	+	+	+
18Y/F	+	U/L	+	+	+	+	+	+	+
14Y/F	-	B/L	+	+	+	+	+	-	+
19Y/M	-	B/L	+	+	+	+	+	-	+
24Y/F	-	B/L	+	+	+	+	+	-	+
20Y/F	-	B/L	+	+	+	+	+	-	+
18Y/F	-	U/L	+	+	+	+	+	+	+
26Y/M	-	B/L	+	+	+	+	+	-	+
17Y/F	+	B/L	+	+	+	+	+	-	+
21Y/M	+	B/L	+	+	+	+	+	+	+
23Y/M	-	B/L	+	+	+	+	+	+	+

Dermoscopic Findings of EFFC

Age/ Sex	Reddish brown background	Follicular papules	Gray dots	Scaling	Rosettes	Telangiectasia
12Y/M	+	+	+	+	+	-
15Y/M	+	+	+	+	+	H
17Y/M	+	+	+	+	-	+
22Y/M	+	+	+	+	-	-
25Y/M	+	+	+	+	-	-
18Y/F	+	+	+	+	+	-
14Y/F	+	+	+	+	-	-
19Y/M	+	+	+	+	-	-
24Y/F	+	+	+	+	+	+
20Y/F	+	+	+	+	+	-
18Y/F	+	+	+	+	+	-
26Y/M	+	+	+	+	-	+
17Y/F	+	+	+	+	+	-
21Y/M	+	+	+	+	-	+
23Y/M	+	+	+	+	-	-

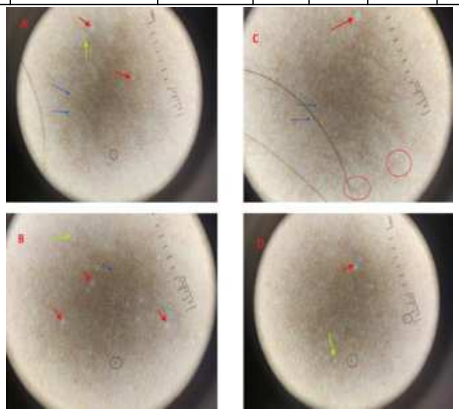

Figure 2 (A-D) : Dermoscopy of Erythromelanosis follicularis faciei et colli. Numerous Follicular keratotic plugs over a reddish brown background (red arrows).

Perifollicular and interfollicular gray-brown dots and granules (black circles). Whitish scales, mainly perifollicular in distribution (blue arrows). Rosettes (yellow arrows). Telangiectasias (red circles).

DISCUSSION

The dermoscopic finding of EFFC was reported by Errichetti et al for the first time and our findings were consistent with their study [2]. Mouni et al [3] later on revealed similar findings in their patients. Similar dermoscopic findings can be seen in erythrosis pigmentosa peribuccalis which is considered to be a variant of this disease by few authors [4]. EFFC can be differentiated from many close differentials on dermoscopy.

Dermoscopy of melasma reveals light to dark brown uniform patches with capillary network while brownish pseudonetwork along with gray dots and granules with telangiectatic vessels seen in Reihl melanosis [4,5]

The findings on dermoscopy of follicular plugging, scaling, and reddish brown background correspond to histopathological findings of hyperkeratotic hair follicles, orthokeratosis, and ectatic vessels respectively.

Gray-blue Dots And Granules

correlate with the presence of pigmentary incontinence and dermal melanophages in the upper dermis respectively [2,3]. White rosettes, though encountered in a few cases, are not a specific finding and have been reported in many dermatological disorders like basal cell carcinoma, melanomas, actinic keratosis, seborrheic keratosis, and lichen planus like keratosis [6]. In conditions where there is hair follicle and perifollicular involvement, it has been suggested that the optical effect between polarized light and follicular structures at the infundibular keratin layer leads to formation of rosettes [6].

Narrowing of infundibula or blockage by keratin has been postulated to result in rosette formation by some authors, while others proposed that rosettes correspond to an alternating focal hyperkeratosis and normal corneal layer and keratin-filled acrosyringeal openings [7].

EFFC is frequently associated with KP. A family history of KP has also been reported in the literature [8,9,10]. Similarobservations were made in a cross-sectional, descriptive study by Rather et. Al where all (100%) patients had KP on different parts of the body [11].

Strong genetic relation between these two conditions is suggested due to it's coexistence and familial occurrence .

Treatment for EFFC has always given satisfactory results, posing a therapeutic challenge. Various options have been explored but lesions recur once the treatment is discontinued. Topicals keratolytic agents such as ammonium lactate (12%),

tretinoin cream (0.05%, 1%), salicylic acid 2%, metronidazole, hydroquinone 4%, chemical peel has been tried [12,13].

Intermittent oral isotretinoin, and long-pulsed dye laser are other treatment options being considered [13,14,15].

Additionally, patient is advised to avoid sun exposure, do photoprotection with the use of sunscreen on a regular basis with moisturizer if there is dryness.

CONCLUSIONS

Of the 15 patients diagnosed to have the disease, 6 (40%) were females. Family history was positive in 4 (26.6%) patients. Two (13.3%) had unilateral presentation. Additional atypical sites involved were temples, forehead, and upper lip. KP was present in all (100%) and family history of KP was present in 3 (20%) patients.

EFFC may be more prevalent than previously recognized.

Although some cases appear within families—suggesting a potential genetic component— the precise cause remains uncertain. Given that EFFC typically presents with mild cosmetic concerns and tends to follow an asymptomatic course, most individuals with the condition do not seek medical intervention. Additionally, the disorder is often overlooked by healthcare providers. Increasing awareness among dermatologists and improving recognition of its clinical features are essential for accurate diagnosis and for developing more effective treatment strategies.Dermoscopy serves as a valuable tool in enhancing the diagnostic precision of EFFC, potentially reducing the reliance on invasive methods such as skin biopsies. It also aids in distinguishing EFFC from clinically similar conditions. The presence of white rosettes under polarized dermoscopy in EFFC aligns with previous findings, suggesting that rosettes are not unique to a specific disorder. Instead, they are considered optical artifacts produced by crossed polarization involving follicular and perifollicular structures.

Declaration Of Patient Consent

The authors confirm that all necessary patient consent forms have been obtained. Through these forms, the patient(s) has/have agreed to the publication of their clinical information and images in the journal. They have been informed that their names and initials will not be disclosed, and that reasonable efforts will be made to protect their identity; however, complete anonymity cannot be assured.

REFERENCES

1. Kitamura K, Kato H, Mishima Y, Sonoda S. Erythromelanosis follicularis faciei. Hautarzt. 1960;11:391-393.
2. Errichetti E, Pizzolitto S, Stinco G. Dermoscopy of erythromelanosis follicularis faciei et colli. Actas Dermosifiliogr. 2017;108(8):779-794. DOI: 10.1016/j.ad.2017.04.016. PMID: 28625330.
3. Maouni S, EL Anzi O, Sqalli A, Znati K, Meziane M, Hassam B. Erythromelanosis follicularis faciei et colli: dermoscopy and dermatopathology correlates. JAAD Case Rep. 2019;5(6):535-536. DOI:10.1016/j.jdcr.2019.04.011. PMID: 31205998.
4. Luna PC, Abad ME, González VM, Vigovich F, Casas JG, Larralde M. Erythrosis pigmentosa peribuccalis in an adolescent: dermoscopicdescription and management. Pediatr Dermatol. 2016;33(2):e65- e68.
5. Li Y, Liu J, Sun QN. Characteristic dermoscopic features of melasma. Zhongguo Yi Xue Ke Xue Yuan Xue Bao. 2015;37(2):226-229. DOI: 10.3881/j.issn.1000- 503X.2015.02. 015. PMID: 25936713.
6. Wang L, Xu AE. Four views of Riehl's melanosis: clinical appearance, dermoscopy, confocal microscopy and histopathology. J Eur Acad Dermatol Venereol. 2014;28(9) :1199-1206. DOI: 10.1111/jdv.12264. PMID: 24010902
7. Haspeslagh M, Noe M, De Wispelaere I, et al. Rosettes and other white shiny structures in polarized dermoscopy: histological correlate and optical explanation. J Eur Acad Dermatol Venereol. 2016;30(2):311-313. DOI:10.1111/jdv.13080. PMID:25786770.
8. Augustine M, Jayaseelan E. Erythromelanosis follicularis faciei et colli: Relationship with keratosis pilaris. Indian J Dermatol Venereol Leprol 2008;74:47-9.
9. Lalit G, Anubhav G, Kumar KA, Asit M. Familial erythromelanosis follicularis faciei et colli with extensive keratosis pilaris. Int J Dermatol 2011;50:1400-1.
10. Ermertcan AT, Ozturkcan S, Sahin MT, Turkdogan P,Sacar T. Erythromelanosis follicularis faciei et colli associated with keratosis pilaris in two brothers. Pediatr Dermatol 2006;23:31-4.
11. Rather S, Yaseen A, Mukhija M. Erythromelanosis follicularis faciei et colli— A cross-sectional, descriptive study. Indian J Dermatol. 2016;61(3): 308-313. DOI: 10.4103/ 0019-5154.182419. PMID:27293252.
12. Ertam I, Unal I, Alper S. Erythromelanosisfollicularis faciei et colli: Report of involvement in two female patients Dermatol Online J. 2005;11:23
13. Karakatsanis G, Patsatsi A, Kastoridou C, Chaidemenos G, Sotiriadis D. Erythromelanosis follicularis faciei et colli: Case reports of bilateral lesions in 2 females Cutis. 2007;79:459–61
14. Jang HS, Lee CW, Cha JH, Kim SJ, Oh CK, Kwn KS. Clinicopathological study of 12 cases of erythromelanosis follicularis faciei et colli. Korean J Dermatol 2001;39:574-80.
15. Kurita M, Momosawa A, Ozaki M, Ban I, Harii K. Long-pulsed dye laser for the treatment of erythromelanosis follicularis faciei: Report of two clinical cases. Dermatol Surg 2006;32:1414-7.