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Southeast Asian Journal of Health Professional

Journal homepage: https://www.sajhp.com/

Case Report

Eruptive collagenoma: An interesting case report

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ARTICLE INFO

Article history:
Received 05-09-2022
Accepted 23-09-2022
Available online 27-01-2023

Keywords:
Eruptive collagenoma
Masson's trichrome stain
Vongieson stain

ABSTRACT

Eruptive cutaneous collagenoma is a non-familial connective tissue nevi of unknown etiology presented with an abrupt onset. To date, the literatures on eruptive cutaneous collagenoma are extremely rare in India. Herein, we report a rare case of eruptive collagenoma in a 26-year old young male with epilepsy and mental retardation, who presented with multiple asymptomatic papules and nodules over the chest and abdomen with no systemic involvement. There was no positive family history or history of consanguineous marriage, and diagnosis was confirmed histologically.
We report this case due to paucity in Indian literature.

1. Introduction

Eruptive collagenoma is a rare type of connective tissue nevi, which was first described by Colomb in 1955.[1] It presents with a sudden onset of multiple fibrous, skin-colored or brownish papules and nodules that coalesce to form the plaques typically over the trunk, commonly seen in young adults.[2] The pathogenesis is not clear. These connective tissue nevi are characterized by abnormal hamartomas proliferation of extracellular dermal tissue matrix, predominantly collagen and elastin and/or proteoglycans both in the structure and density.[3]

We describe a case of eruptive collagenoma in a young male with epilepsy and mental retardation as it is extremely rare with less than 10 reported cases worldwide.

2. Case History

A 26-year-old male presented to the dermatology department with a history of insidious onset of multiple, raised progressive skin lesions over the chest and abdomen for 3 months. He was born to a non-consanguineous union and had history of neonatal ICU admission for hydrocephalus resulting in developmental delay, mental retardation and epilepsy.

Cutaneous examination revealed multiple discrete skin-colored to erythematous papules and nodules of size ranging from 1.0 cm × 1.0 cm to 5.0 cm × 5.0 cm predominantly over abdomen and chest, sparing other sites [Figure 1]. They were firm, non-tender, not attached to deeper structures and skin over the lesions pinchable. The largest nodule presented with erosion and perilesional edema and erythema. No generalised lymphadenopathy.

The differential diagnosis of papular elastorrhexis, papular cutaneous T-cell lymphoma and other lymphomas were considered. No systemic abnormalities were detected. Laboratory parameters were within normal limits.

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https://doi.org/10.18231/j.sajhp.2022.021

Histopathology revealed epidermal atrophy and dense interlacing bundles of fibrocollagenous tissue in dermis, on hematoxylin and eosin stain [Figure 2]. Special stains using Masson's trichrome (Blue) and Von-Gieson (Red) stains showed dense collagen tissue in the dermis [Figures 3 and 4], whereas elastin fibres were scarce showed which further confirmed the diagnosis of eruptive collagenoma.

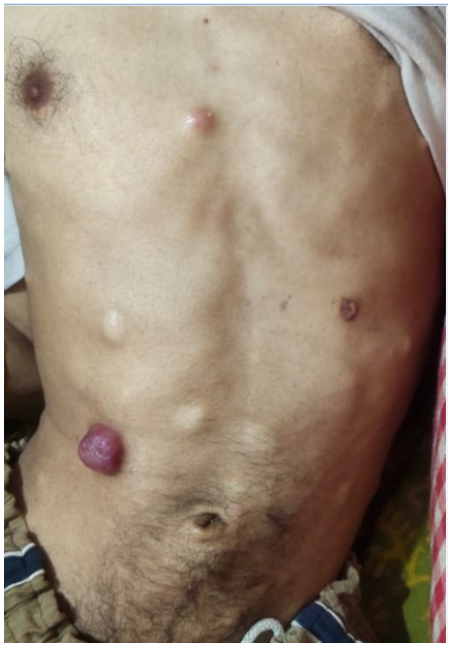

Fig. 1: Multiple discrete skin-colored to erythematous papules and nodules of size ranging from 1-5 cm diameter seen predominantly over abdomen and chest.

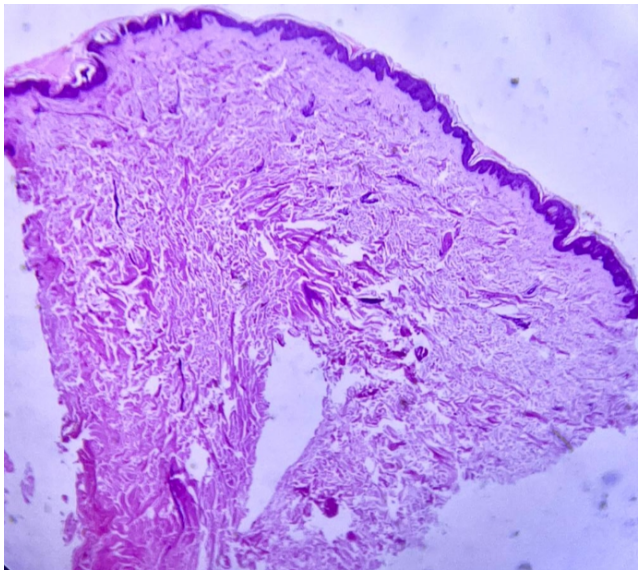

Fig. 2: Epidermal atrophy and dense interlacing bundles of fibrocollagenous tissue in dermis (H and E, X10)

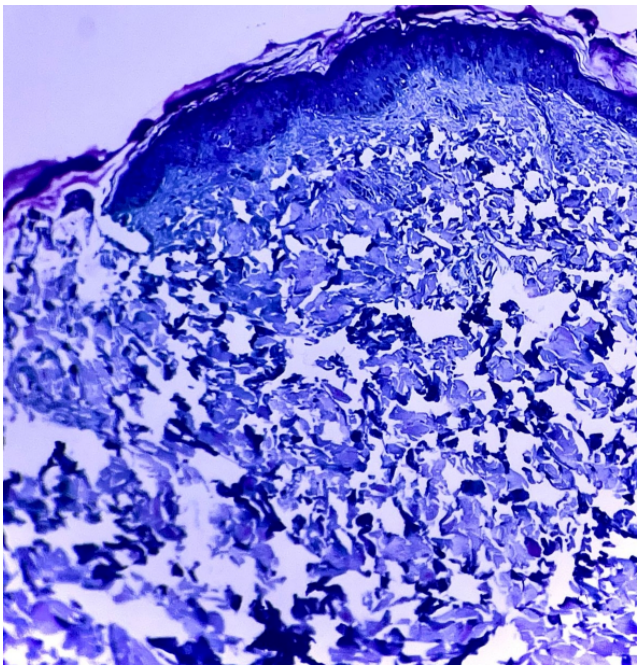

Fig. 3: Dense blue collagen fibers (Masson's trichrome stain, X40)

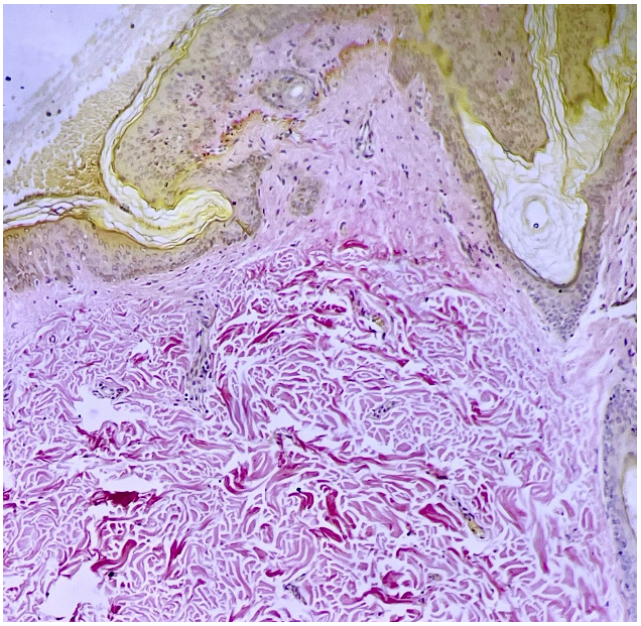

Fig. 4: Dense red collagen fibers (van Gieson stain, X40)

3. Discussion

The collagenoma is classified based on the mode of inheritance as acquired or inherited and on the pattern of distribution as localized or generalized.[4]

Acquired type presents with sudden asymptomatic, firm, skin colored papules and nodules of various sizes, localised to the upper extremities or trunk. Such eruptive and isolated collagenoma usually seen in the first two decades of life. Inherited type includes familial cutaneous collagenomas and shagreen patches of tuberous sclerosis. Familial collagenoma presents in the second and third decades of life characterized by numerous, symmetrical lesions over the trunk and proximal arms with a positive family history and systemic involvement.[2]

Lesions are usually numerous and symmetrical in both the varieties. Isolated forms are seen on palms, soles and labium majus.[5]

Histopathology of the lesions shows dense, coarse collagen fibres in the dermis. Elastin appears to be diminished in density, may be due to dilution phenomenon due to excess accumulation of collagen.[4]

Elastic nevus, nevus anelasticus and papular elastorrhexis, scars and anetoderma are the common differential diagnosis of eruptive cutaneous collagenoma.[6] Eruptive collagenoma should be differentiated from other kinds of cutaneous collagenoma, anetoderma of Schweninger-Buzzi and Buschke-Ollendroff syndrome. There are few case reports on collagenomas in association with the other systemic diseases, such as cardiomyopathy, Down syndrome, hypogonadism, pseudohypoparathyroidism, and multiple endocrine neoplasia type I.[7] In our case of eruptive collagenoma, there was an association with epilepsy and mental retardation.

Our patient was diagnosed as eruptive collagenoma based on sudden onset of multiple skin lesions, histopathology, and absence of family history.

4. Conclusion

There are few published reports on eruptive collagenoma in Indian literature. This rare entity can be diagnosed clinically, and confirmed by special staining. The publication of new cases will improve the case detection.

5. Conflict of Interest

None.

6. Source of Funding

None.

7. Acknowledgement

We are extremely thankful to the parents of the patient for their immense co-operation and for allowing us to publish the case details and the photographs.

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Cite this article: Shruthi HN, Samagani A, Prabhu S. Eruptive collagenoma: An interesting case report. *Southeast Asian J Health Prof* 2022;5(4):93-95.