

Eruptive collagenoma: A rare connective tissue hamartoma presenting with an unusual morphology

Dear Editor,

Collagenoma is a connective tissue nevus predominantly composed of collagen.¹ Collagenomas represent benign hamartomatous lesions of the dermis of unknown aetiology. They are classified as inherited or acquired; inherited include familial cutaneous collagenomas and shagreen patches of tuberous sclerosis and the acquired include eruptive collagenomas and isolated collagenomas.² We report here an unusual case of eruptive collagenoma in a middle-aged man.

A 51-year-old man presented to us with gradually progressive, asymptomatic symmetric eruption of multiple,

skin-coloured, raised lesions present on chest, abdomen, upper back and bilateral arms for seven months. There was no past history of trauma or skin eruptions at the site of lesions. Systemic examination showed no abnormality. On dermatological examination, multiple partly circumscribed, discrete to coalescent, firm, waxy flesh-coloured to dusky red nodules and plaques of varying sizes, 0.5×0.5 cm² to 2.0×2.0 cm² were present symmetrically on chest, upper back (scapular region) and proximal upper limbs [Figures 1a and 1b]. The overlying skin showed no surface changes; mild tenderness was present over larger coalescent lesions. The mucosae, scalp and nails were normal.



Figure 1a: Multiple, well-defined nodules coalescing to form plaques present symmetrically on upper chest, proximal limbs and abdomen



Figure 1b: Multiple well- to ill-defined, discrete to coalescent, firm, waxy flesh-coloured to dusky red nodulo-plaques varying from 0.5×0.5 cm² to 2.0×2.0 cm² in size present symmetrically on upper back (scapular region) and proximal upper limbs

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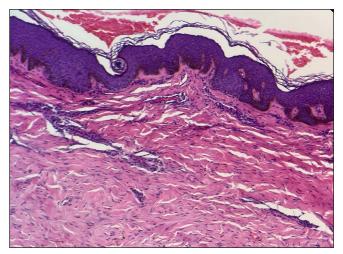


Figure 2a: (Low power, 10× lens total magnification 100×) Mild acanthosis, reticular dermis shows dense collagenization, scantly infiltrate

Differential diagnoses of mycosis fungoides, primary cutaneous B-cell lymphoma, amyloidosis, leiomyomas, multiple keloids, papular mucinosis/lichen myxedematosus and histoid leprosy were considered. A skin biopsy was done and on histopathological examination mild acanthosis of epidermis, dense collagenization in the reticular dermis with a mild perivascular infiltrate of lymphocytes and plasma cells were observed [Figure 2a]. Zeihl neelsen and Alcian Blue stain were negative for acid fast bacilli and mucin deposition. Masson's trichrome and Verhoeff-van-Gieson stains showed markedly increased collagen arranged in a haphazard pattern in the dermis with a reduction in elastin fibres [Figure 2b]. With clinical and the histopathology findings, two differential diagnoses were considered, familial cutaneous collagenoma and eruptive collagenoma.

Eruptive collagenoma was first described by Colomb in 1955.3 They usually present in the first two decades of life and lesions tend to be asymptomatic, cutaneous nodules which are distributed symmetrically on head and neck, upper and lower limbs. 4 Histologically, it is characterised by dense coarse collagen fibres arranged haphazardly in dermis with a decrease in elastic fibres.⁵ Eruptive collagenoma needs to be differentiated from familial cutaneous collagenoma which is inherited in an autosomal dominant pattern with a positive family history.6 Familial cutaneous collagenoma (FCC) may be associated with cardiac abnormalities such as progressive cardiomyopathy and conduction defects attributed to fibrotic process affecting various structures of the heart.7 Lesions of FCC usually affect the trunk (upper back) and tend to be more numerous than the lesions of eruptive collagenoma which mainly affect the periphery including head, neck, upper and lower limbs.4 In our case, there was no family history and there was no evidence of any cardiovascular disease. Based on these findings, we diagnosed this as a case of eruptive collagenoma. A review of literature of similar cases has been presented in Table 1. We report this case of eruptive

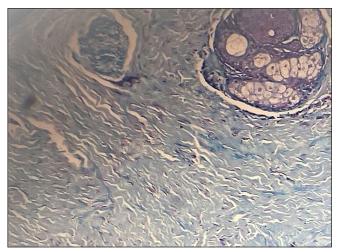


Figure 2b: (Masson's Trichrome, $400\times$) Dense collagen fibres throughout dermis

Table 1: Summary of eruptive collagenomas reported from India by various authors

Author	Age (years)/ Sex	Sites	Clinical morphology	Histopathology
Mukhi et al. ⁸	42/M		Skin coloured, firm, non-tender nodules and plaques	Lobules of densely collagenized acellular connective tissue in dermis; elastic fibres
Sharma et al.4	14/F	Lower back, chest and upper thighs	Skin-coloured to slightly hypopig- mented, firm, non-tender papules	Randomly arranged coarse collagen bundles; elastic fibres↓↓
Barad et al. ⁵	4/F	Bilateral axilla, upper back and face	Symmetrical brownish papules and plaques with leathery surface	Dermis with hap- hazardly arranged thickened collagen bundles; elastic fibres \leftarrow\dots
Brar et al. ⁹	18/F	Upper 2/3 of back & mons pubis	Skin coloured, firm, non-tender nodules	Focal acanthosis with significantly increased density of collagen bundles; elastic fibres \$\sqrt{\psi}\$
Sonkusale et al. ¹⁰	5/F	Face and back	Skin coloured discrete-to- confluent papules and plaques	Haphazardly arranged thick collagen bundle in the dermis; elastic fibres↓↓
Present case	51/M	Chest, abdomen, upper back and bilat- eral arms	Flesh coloured to dusky red, discrete to coalescent, firm, waxy nodulo-plaques	Mild acanthosis with dense collagenization in the reticular dermis and mild perivascu- lar infiltrate; elastin fibres↓↓

collagenoma due to its unusual distribution and morphology where histopathology helped us clinch the diagnosis.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Conflicts of interest

There are no conflicts of interest.

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References

- Madke B, Doshi B, Nayak C, Prasannan R. Isolated pedunculated collagenoma (collagen nevi) of the scalp. Indian J Dermatol. 2013;58:411.
- Shruti S, Siraj F, Khuller G, Saxena A. Isolated collagenoma on the face: a rare occurrence. Acta Dermatovenerol Alp Pannonica Adriat. 2019;28:41–43. Erratum for: Acta Dermatovenerol Alp Pannonica Adriat. 2019;28:95.
- Zhao C, Ma W, Wang Y, Sun Q. Female with eruptive collagenoma clustered in the left lateral aspect of the abdomen. J Dermatol. 2010;37:843-5.
- 4. Sharma R, Verma P, Singal A, Sharma S. Eruptive collagenoma. Indian J Dermatol Venereol Leprol. 2013;79:256–8.
- Barad P, Fernandes J, Shukla P. Eruptive collagenoma: a rarely reported entity in Indian literature. Indian J Dermatol. 2015;60:104.
- Uitto J, Santa-Cruz DJ, Eisen AZ. Familial cutaneous collagenoma: genetic studies on a family. Br J Dermatol. 1979;101:185–95.
- Batra P, Loyd A, Patel R, Walters R, Stein JA. Eruptive collagenomas. Dermatol Online J. 2010;16:3.
- 8. Mukhi SV, Kumar P, Yuvarajkumar D, Raghuveer CV. Eruptive collagenoma. Indian J Dermatol Venereol Leprol. 2002;68:98–9.
- Brar BK, Mahajan BB, Kamra N. Eruptive Ccollagenoma in a Mongol Girlmongol girl: A Rare Association.rare association. International Journal of Case Reports and Images (IJCRI). 2015;6:427–30.
- Sonkusale P, Jain S, Deshmukh A. Eruptive collagenoma: A rare entity in pediatric age. Indian Journal of Paediatric Dermatology. 2019;20:240.

Cervicofacial actinomycosis with an atypical presentation

Dear Editor,

Cervicofacial actinomycosis, also called lumpy jaw, is a chronic, suppurative and granulomatous bacterial infection caused mostly by *Actinomyces* species and rarely by *Propionicusbacterium* species.¹ It classically presents as an indurated and suppurative nodule which subsequently results in draining sinuses and tissue fibrosis.¹ Herein, we present an atypical morphological presentation of cervicofacial actinomycosis, resembling a 'bunch of grapes'.

A 45-year-old man presented with multiple, painless red elevated lesions on his face since 6 months. There was no history of granular discharge, any congenital anomaly, dental pain, dental procedure or trauma prior to the appearance of lesions. Personal and family history was unremarkable. Cutaneous examination showed multiple erythematous to pinkish-grey nodules on an indurated base, resembling a "bunch of grapes" on the left side of the face around nose. It was associated with swelling of the nose, upper lip and left mandible [Figure 1]. There was no regional lymphadenopathy. General examination

and other systemic examinations were unremarkable. On dermoscopy (Dermlite DL4, polarised, 10× magnification), yellow homogenous areas, arborizing vessels and shiny white structures were visible [Figure 2]. Haematological parameters were within normal limits and radiological investigations failed to show any bony abnormality. We considered cervicofacial actinomycosis, and botryomycosis as differentials. Histopathology revealed granules with radiating slender filaments [Figure 3a] and the Grocott Methenamine silver stain showed filamentous bacteria [Figure 3b]. Cultures for bacteria, *Mycobacteria*, fungus and *Actinomyces* did grow any organism. A diagnosis of actinomycosis was made, and the patient was treated with oral amoxicillin with clavulanic acid 625 mg thrice daily and oral doxycycline 100 mg twice daily. The lesions resolved completely after 5-months [Figure 4].

Cervicofacial actinomycosis clinically manifests in three stages, initially presenting as soft swelling of the peri-mandibular area (stage 1), followed by woody hard induration and development of multiple sinus tracts and fistulas discharging

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