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Case Report .

Eruptive Collagenomas: A Case Report and Review of Literature

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ABSTRACT

Collagenoma or connective tissue nevus is a rare hamartomatous lesion that mainly consists of dermal collagen. Collagenomas are classified into hereditary and acquired collagenomas. Eruptive collagenomas are acquired collagenomas that are characterized by the sudden appearance of raised, cutaneous, firm, white-to-skin-colored papules or nodules. Here in; we report a 35-year- old female presented with 8 months history of asymptomatic slowly progressive skin lesions. Past medical history, drug history and review of systems were all unremarkable. Her parents are non-consanguineous and no similar case in the family. Skin examination revealed multiple non scaly whitish papules scattered on her abdomen, chest wall and back. Skin biopsy showed increased dermal collagen bundles. Bone scan of long bones was normal. Cardiologist consultation revealed no cardiac disease. Based on the above features, a diagnosis of eruptive collagenomas was made. Patient was reassured and put under periodic follow up.

Keywords: Collagenoma, Connective Tissue Nevus.

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INTRODUCTION

Collagenomas, or connective tissue nevus is a rare hamartomatous lesions in which the collagen will be the predominant element of that lesion. There are two forms, inherited and acquired. Inherited collagenomas are autosomal dominant.[1-3] They include, familial cutaneous collagenomas, dermatofibrosis lenticularis disseminate (Buscke Ollendorf syndrome), shagreen patch (tuberous sclerosis).

Collagenomas have been associated with multiple endocrine neoplasia type 1 and pseudo-Hurler polydystrophy (mucolipidosis III). As in Proteus syndrome, collagenomas of mucolipidosis III are often acral, sometimes of the plantar cerebriform type. Plantar collagenomas can occur in the absence of the Proteus syndrome.[4,5] Many of the cutaneous lesions in Buschke–Ollendorf syndrome tend to have increased elastic fibers, but some appear to be primarily collagenous.

The acquired collagenomas include eruptive collagenoma and isolated collagenoma. *Fibroblastic connective tissue nevus* is a recently delineated variant that presents as a solitary, slowly growing, asymptomatic, firm plaque or nodule.[5]

The pathogenesis of collagenomas is still unknown. The defect seems to be a reduced production of collagenase in that location and therefore a decreased local degradation of collagen.[2]

Collagenoma consists almost exclusively of type I collagen.[1] Connective tissue nevi are firm, solitary or multiple, skin-colored papule, nodules or pluqes that usually present at birth or during childhood. Collagenomas in most cases are asymptomatic. However, some patients with collagenomas have tenderness or pruritus.[4]

CASE REPORT

A 35-year- old female presented with 8 months history of asymptomatic slowly progressive skin lesions. Past medical history, drug history and review of systems were all unremarkable. Her parents are non-consanguineous and no similar case in the family.

Skin examination revealed multiple non scaly whitish papules scattered on her abdomen, chest wall and back (figure 1). Hairs, nails, and mucus membranes were all normal. Skin biopsy showed increased dermal collagen bundles (figure 2). Bone scan of long bones was normal. Cardiologist consultation revealed no cardiac disease.

Based on the above clinical and histopathologic features, a diagnosis of eruptive collangeomas was made. Patient was reassured and put under periodic follow up.

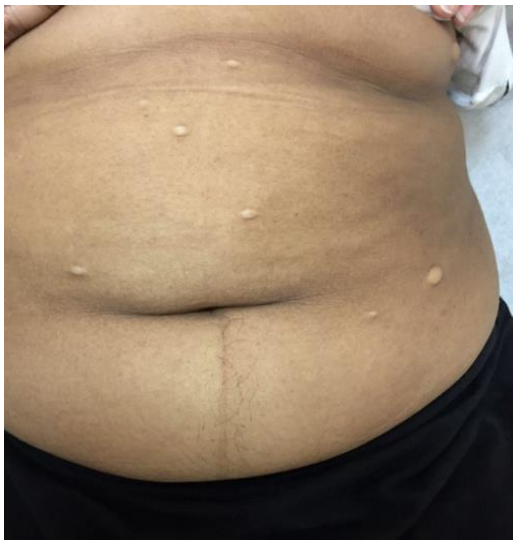

Fig 1: Multiple soft small non scaly white papules scattered on the abdomen

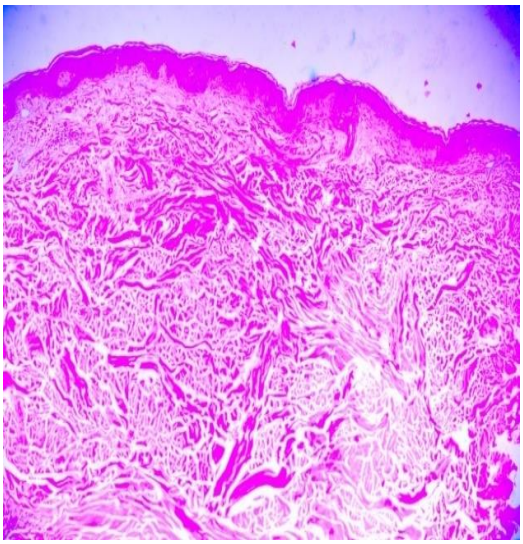

Fig 2: Histopathology of the skin biopsy showing increased dermal collagen bundles.

DISCUSSION

Connective-tissue nevi are hamartomas rather than neoplasm in the dermis that consist of collagen, elastin or proteoglycans. Collagenoma is a form of connective-tissue nevus that is composed primarily of collagen.

Eruptive collagenomas are characterized by the sudden appearance of raised, cutaneous, firm, white-to-skin-colored papules or nodules without any associated systemic findings. The lesions vary in size but that are usually less than 1 cm.[3] The age of onset is usually during childhood but, like our case, the age of onset has been reported in the later years of life.[2,4] Rapidly growing eruptive collagenomas have been reported in pregnancy.[4]

The main differential diagnosis in our patient includes Familial cutaneous collagenomas (FCC). FCC is characterized by the development of asymptomatic nodules that are symmetrically distributed on the upper trunk, most commonly in second and third decades of life. It could be associated with possible cardiac findings, such as progressive cardiomyopathy or conduction defects. , However, our patient has no cardiac defects. Another important differential diagnosis in our patient is Buscke Ollendorf syndrome (BOS). Although elastomas are more common than collagenomas in BOS, the bone scanning in our patient did not show osteopoikilosis, moreover, the collagenomas of BOS usually begin in early age of life.[5,6]

Collagenomas are generally asymptomatic and not usually of cosmetic significance. Surgical excision is necessary only if the patient needs it for cosmetic reasons.[2]

One case report has described a linear nodular collagenoma treated successfully with intralesional triamcinolone.[1,3]

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