



FIRM BUT FAMILIAR: A TYPICAL CASE OF DERMATOFIBROMA

Dermatology

Dr. Kavya Rajeev* Junior Resident, Department Of Dermatology, Venereology And Leprosy.
*Corresponding Author

Dr. Sowbaghya P T Junior Resident, Department Of Dermatology, Venereology and Leprosy.

ABSTRACT

Dermatofibroma is a common benign tumour of unknown etiology. It is mostly encountered in females. Though it can occur at any age, it often presents during adulthood. A typical dermatofibroma appears as single or multiple firm skin to flesh colored firm papules or nodules. Being an asymptomatic lesion, the patient reports late to the clinician. The most common site is the shins or calves. Lesions are well circumscribed; color varies according to the age of lesions—early lesions are red or red brown whereas older lesions are brown to skin colored. Dimpling or Fitzpatrick sign is characteristic. There are various clinical and atypical variants of dermatofibroma. Grenz zone can be appreciated in histopathology. Complete excision remains the treatment of choice.

KEYWORDS

Dermatofibroma, Benign, Fitzpatrick sign, Grenz zone

INTRODUCTION

Dermatofibroma is a slow growing benign cutaneous tumour due to reactive fibroblastic proliferation. It may occur naturally or develop due to trauma. Dermatofibroma is also known as Histiocytoma cutis, sub epidermal nodular fibrosis, sclerosing angioma. The clinical presentation varies from solitary, round, oval or targetoid papule, plaque or nodule. It is firm on palpation and freely movable over the subcutis. Extremities are more frequently involved. Squeezing the skin adjacent to a dermatofibroma causes a dimpled appearance on its surface, which is termed as positive pinch sign or dimple sign. Various histopathological variants encountered includes cellular, atypical, and aneurysmal. Dermoscopy show red homogenous pattern surrounded with a brown pigment network. Occasional tenderness and pruritus are the accompanying symptoms.

Dermatofibroma is more of a cosmetic concern to the patient and complete excision remains the main stay of treatment. This case report deals with a 52-year-old male diagnosed with dermatofibroma.

Case Report

52-year-old male came to out-patient department with complaints of asymptomatic flesh colored raised lesion over left shoulder for 2 years. It was insidious in onset and gradually increased to the present size. No history of trauma prior to the onset of lesion. No history of bleeding from the lesion. No history of pain or itching. On examination, a single well circumscribed flesh colored firm, non- tender, mobile papule of size 3x3 cm noted over the left shoulder. Dimple sign positive. No lesions elsewhere. Based on the clinical findings, a diagnosis of dermatofibroma was made.



Figure 1: single well circumscribed flesh colored firm, non- tender, mobile papule of size 3x3 cm noted over the left shoulder

DISCUSSION

Dermatofibroma is a common benign cutaneous tumour characterized by fibroblastic proliferation, typically presenting as a firm, slow-growing, flesh-colored to brown nodule. It is more frequently seen in young to middle-aged females and is commonly found on the lower

extremities.^[1] However, this case involves a 52-year-old male with a lesion on the left shoulder, which is an atypical presentation since the upper body is less commonly affected.^[1]

The etiology of dermatofibroma is uncertain, with theories suggesting a reactive process following trauma, insect bites, follicular rupture, or foreign bodies like a suture material.^[2] Our patient did not report any preceding trauma, pointing towards idiopathic etiology. The lesion was firm, mobile, and non-tender. The positive dimple sign, a hallmark clinical feature was observed, supporting the diagnosis.^[3]

Histopathologically, dermatofibromas typically exhibit spindle cell proliferation in the dermis with entrapment of collagen bundles and a Grenz zone.^[4] They have different subtypes including cellular, aneurysmal, and atypical variants, which may complicate diagnosis.^[4] Dermoscopy helps in differentiating dermatofibromas from other neoplasms by showing a red homogeneous pattern surrounded by a pigmented network.

Management is usually conservative, with surgical excision considered for cosmetic reasons, symptomatic lesions, or cases where malignancy is suspected. Dermatofibrosarcoma protuberans and keratoacanthomas are the closest differentials.^[4]

CONCLUSION

Dermatofibroma is one of the painful tumors of the skin with classic clinical features but atypical presentations can pose a diagnostic challenge.

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