

# LINEAR FOCAL ELASTOSIS

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A case of linear focal elastosis is reported. A 19-year-old male presented with asymptomatic, palpable yellow lines over back along with striae distensae over axilla. Light microscopic examination demonstrated dermal thickening but no change in the epidermis. The elastic tissue stain revealed fragmented elastic fibres throughout the dermis.

**Key words : Elastosis, Focal**

## Introduction

Linear focal elastosis was first reported by Burket et al in 1989 in three patients.<sup>1</sup> The characteristic lesions are palpable, striae-like yellow lines on the middle and lower aspect of back. Histologically dermal elastosis is seen corresponding to the area of yellow colour seen clinically. Electron microscopy demonstrates numerous elongated and fragmented elastic fibres. This disorder has been described only in male patients, with onset after 60 years of age, except for one female patient reported recently.<sup>2</sup> A fairly uniform feature of LFE is its occurrence on the dorsal skin, suggesting involvement of this specific anatomical site in its pathogenesis. At first glance lesions resemble striae distensae. Striae distensae consists of bands of thin, wrinkled skin that are reddish, purple, or white and develop as a result of sudden weight gain, hormonal change, or topical steroids use. In contrast the lesions in linear focal elastosis are individual palpable lines arising without such precipitation factors.

## Case Report

A 19-year-old male presented with history of yellow lines on back since one year. There was no history of sudden weight gain or use of topical steroid. Examination revealed yellow coloured, 2-3 mm wide, horizontal linear palpable bands extending symmetrically on both sides of vertebral column. The bands of thin wrinkled skin (striae distensae) were present in both axilla. A biopsy from one of the lesions was taken for histopathology examination. The epidermis was unremarkable. There was deposition of abundant pale staining material separating and fragmenting the larger, darker staining collagen bundles. Elastic tissue stain showed the pale staining material to be wavy, fragmented elastic tissue. The systemic examination was normal. The routine investigations were within normal limits.

## Discussion

We present an unusual case of linear focal elastosis occurring in a 19-year-old boy. White reported a case of linear focal elastosis of the upper back adjacent to striae distensae in both axilla.<sup>3</sup> He postulated that linear focal

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elastosis might represent a degenerative or regenerative process of striae distensae. Trueb et al suggested that this disorder may be merely an unusual form of striae distensae with distinctive process of "elastotic" regeneration, the term elastotic striae seems appropriate.<sup>4</sup> Hagari et al reported a 73-year-old woman with linear focal elastosis associated with striae distensae and commented that it usually arises de novo in the skin, although striae distensae may also be a cause of it.<sup>5</sup> This disease may be more common than a few published reports would suggest, as it is asymptomatic and in an area not easily observed by the patient.

## References

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