ANGIOKERATOMA OF SCROTUM (FORDYCE)

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Four cases of angiokeratoma of scrotum (Fordyce) in persons aged 30, 55, 50 and 58 years of 2, 5, 8 and 3 years duration respectively are reported. Three patients had fungal infection along with dermatitis while the other had piles and fissure. No abnormality was detected in systemic examination. Routine laboratory tests were normal. Histology confirmed the diagnosis. Each individual lesion was electrodessicated with no recurrence in 2 years of follow-up.

Key Words : Angiokeratoma, Scrotum

Introduction

Angiokeratoma is a vascular dermatosis characterized by telangiectasia with a horny overgrowth. The term 'angiokeratoma' is derived from three Greek words meaning vessels, horn and tumour respectively, although it is not a tumour in its true sense. These vascular lesions may be single and discrete or arranged in clusters.[1]

In 1896, Fordyce reported the first case of atypical angiokeratoma of scrotum followed by Imperial and Helwig in 1967. Only two reports are available in Indian literature.[2,3] In the present communication, we are presenting 4 cases of angiokeratoma of scrotum.

Case Reports

Case 1: A 30-year-old grocer presented with moderate pruritus and recurrent profuse bleeding from multiple bluish red papular lesions of 2 years duration only over the undersurface of scrotum with occasional pustules. Examination revealed multiple soft non-keratotic compressible papules of 3-4 mm diameter arranged in clusters with excoriations and some bleeding points (Fig. 1). The patient had fungal infection of groin and scrotum. He had no inguinal lymphadenopathy and varicocele.

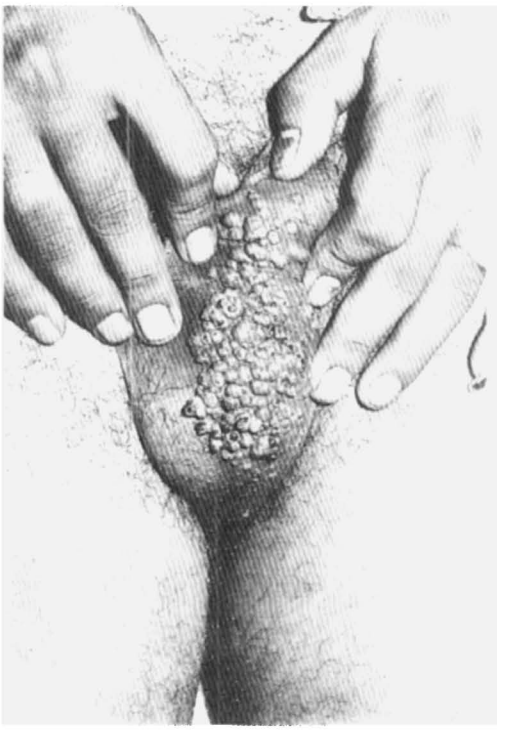

Fig. 1. Lesions of angiokeratoma on scrotum.

Systemic examination and routine laboratory tests were normal. Provisional clinical diagnosis of angiokeratoma of scrotum-Fordyce (AKF) was confirmed by biopsy.

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The vascular lesions were electrodessicated under local anesthesia. The fungal infection was controlled by both oral and topical antifungals.

Case 2 : A 55-year-old office worker presented with bluish red papules over his scrotum of 5 years duration with itching but without any bleeding episode. Examination revealed groups of soft compressible bluish red papules of 2-4 mm size over the scrotum with excoriation marks. The patient also had scrotal eczema. Systemic examination and routine investigations were normal. Histology was consistent with the clinical diagnosis of AKF.

Electrodessication was done for the lesions. Eczema was treated by oral antihistaminics alongwith a cream containing 1% clotrimazole, 0.1% gentamicin and 0.025% beclomethasone dipropionate.

Case 3: A 40-year-old man, also office worker, presented with papules (2-4 mm.) of similar characteristics lasting for the last 8 years with severe pruritus and bleeding episodes but no sign of scrotal venous hypertension. Histology corroborated the clinical diagnosis. The lesions were electrodessicated.

Case 4: A 58-year-old teacher presented with similar papules diffusely arranged over the scrotum for the last 3 years with episodic bleeding, more with emotional excitement. He had a past history of scrotal/groin dermatitis, piles and fissure. Histology was compatible with AKF and treatment was as before.

Almost the same histologic picture was seen in all patients. The epidermis showed mild basket-weave pattern of hyperkeratosis and moderate acanthosis and hypergranulosis but very little papillomatosis. The early lesions showed dilated capillaries in upper dermis, partially enclosed by rete ridges (Fig. 2). The older one showed hyperkeratosis in some sections. Organized thrombi were seen within the dilated capillaries.

Fig. 2. Histopathologic features of angiokeratoma.

Discussion

The nomenclature of angiokeratoma of scrotum was given by Fordyce way back in 1896 reporting a case of 60-year-old man with multiple warty lesions confined to the scrotum only. Individual lesion is small, bright red, vascular papule rarely larger than 3-4 mm. To begin with the lesions are red, soft and compressible while the older lesions may be firm and non-compressible, often keratotic and sometimes warty. Imperial and Helwig reported 50% of such cases were associated with increased venous pressure such as varicocele.[1] But no such cause of scrotal venous hypertension could be detected in our cases.

A few cases had been reported of

having well-circumscribed macular telangiectatic lesion in oral mucosa alongwith scrotal lesions. But our cases were free of oral mucosal involvement. The lesions of angiokeratoma may be asymptomatic, while in some cases there may be itching, soreness and episodes of bleeding. In our cases itching was moderate to severe with episodic profuse bleeding.

The primary cause of AKF might be a pathological alteration either in the walls of blood vessels or in their supporting tissues.[4] Imperial and Helwig consider the pathogenesis of AKF is basically a response to an injury to the wall of the capillaries by various factors such as trauma and chronic irritation.[1] Bean believed that atrophy of dartos muscle and degeneration of elastic tissue incidental to senility result in loss of support of blood vessels. Some emphasized that increase in local venous pressure as in varicocele further aggravated the condition. Further with injury to the wall of papillary capillary, there is dilatation and impaired contractibility of their wall.[1] Later on, secondary fragmentation of the elastic tissue by overdistension occurs, causing damage and vascular dilatation.[1] We believe that the associated fungal infection and eczema of scrotum/groin had led to trauma and chronic irritation causing changes in the vessel wall in susceptible individuals.

References

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