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Case Report

Spontaneous Keloid, A Case Report

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Abstract

A keloid is a cutaneous lesion that develops following skin injury. Keloid is characterized by an overgrowth of tissue beyond the borders of the original wound. Keloid formation without any injury is rare. Spontaneous keloid may be associated with some syndromes. We describe a case where a woman presented with multiple keloid in different parts of her body but did not have history of any trauma.

Keywords: *Spontaneous; Keloid; Injury*

Introduction

Any kind of skin injury may result in fibroproliferative lesions of the skin known as a keloid. Keloid tissue extends beyond the margins of the wound that differentiates it from hypertrophic scar [1]. Keloids are usually symptomless but can cause itching and pain. They have an aesthetic as well as the psychosocial impact on patients [1,2]. African, Hispanic, or Asian descents are more prone to develop a keloid. Spontaneous keloids develop without any history of trauma or surgery. In literature reports of spontaneous keloids are rare. The exact etiology of spontaneous keloid is still unknown, but it has been found associated with certain genetic abnormalities [3].

Case Report

A 36-year-old female presented to the outpatient department of medicine with multiple skin lesions on different parts of her body. As she mentioned these lesions are developing for the last ten years. These lesions had first appeared on the skin over the left calf muscle (Figure 1); later on, similar lesions appeared over other body parts which include the right leg (Figure 2), right foot (Figure 3), left arm (Figure 4), right forearm (Figure 5) and chest. Patent complained about itching over the keloids. All of these cutaneous lesions gradually increased in number and size over time. There are no histories of trauma, surgery, burn over the affected sites. The patients' skin condition was normal before developing the lesions. For these skin lesions, she consulted with the local general practitioner and also with a dermatologist, who diagnosed these lesions as keloids but don't advise for biopsy to confirm. The patient was disappointed as lesions involved more body parts day by day and for reviewing her condition she presented in the medicine outpatient department. She is married, having a daughter. There was no family history of similar types of cutaneous lesions. On physical examination, her skin examination

revealed firm, irregularly shaped, hyperpigmented and slightly dark nodules with a shiny, smooth surface over the left calf, left arm, right foot, right forearm and chest. The examination of other systems was normal. Routine laboratory values were within normal ranges. Biopsies were taken from different sites of showed nodular thick hyalinized collagen fibers in the dermis which are very much suggestive of typical keloid.

Discussion

In some individuals, cutaneous injury provokes the growth of dense fibrous tissue at the site of injury that extends beyond the margin of lesion, and this is known as a keloid. In the normal healing process after an injury fibrous tissue doesn't extend beyond the original borders of the wound [1]. They are usually firm in consistency. Colour varies from skin coloured to hypopigmented or hyperpigmented. Shapes are variable. Although keloids can develop at any age, it is most commonly found in age groups between 10 to 30 years. It mostly affects the anterior chest especially, shoulders, the upper part of the arm, upper back, back of the neck, and also earlobes [2]. Palms and soles usually don't develop keloids. All ethnic backgrounds can form keloid scars but for unknown reasons, it is more prevalent in the black population, Hispanics, and Asians. Women during pregnancy tend to develop keloid more [2,3]. The exact etiology of keloid is still unknown. Keloids follow cutaneous injury and irritation such as trauma, burn, skin incision, insect bite, vaccination, skin piercing, acne, chickenpox. Various factors such as genetic, hormonal, immunogenic and environmental factors are presumed to play role in the pathogenesis of keloid scar [3]. As mentioned spontaneous keloid formation is rare but Dubowitz syndrome, Rubenstein-Taybi syndrome, Noonan syndrome, Goeminne syndrome has been reported to be associated with the development of spontaneous keloids [4]. Various malignant and benign tumors, cutaneous lesions of sarcoidosis can resemble keloids and so should be put in differentials [3,4]. In histological examination, there is an increase in the amount of collagen in keloids. A thickened hyalinized collagen named keloidal collagen is also specific for keloids. It has been found that certain genetic and environmental factors play a role in the development of keloid as not all individuals suffering injury develop a keloid. The tendency to develop fibrous tissue after an injury even varies between individuals. Whether a keloid may form spontaneously is still a matter of debate. Our patient had multiple keloids over different sites of the body. We searched for different syndromes that often present with these types of spontaneous keloid, but no association found. Keloid scars don't regress spontaneously and spontaneous keloids tend to grow. Although intralesional steroid injection, surgical excision, cryotherapy, laser therapy, and the application of silicone gel sheets are commonly used with success as a treatment modality of keloid, spontaneous keloid recurs after these treatments. Other drugs that can also in the use of keloid and spontaneous keloid are 5 fluorouracil, imiquimod, mitomycin C, retinoids, calcium channel blockers, bleomycin, and interferon-α 2b. The success rate of these treatment options is variable [5].

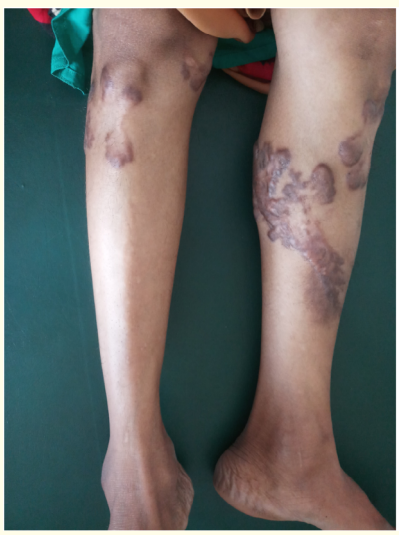

Figure 1

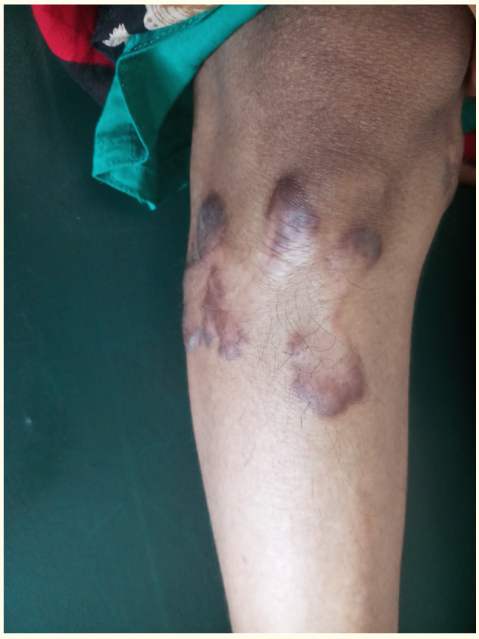

Figure 2

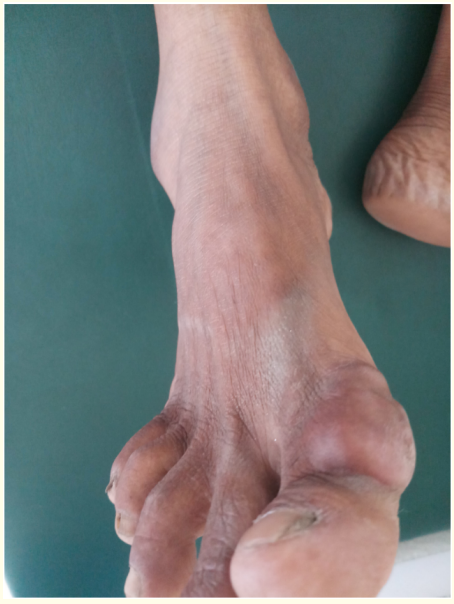

Figure 3

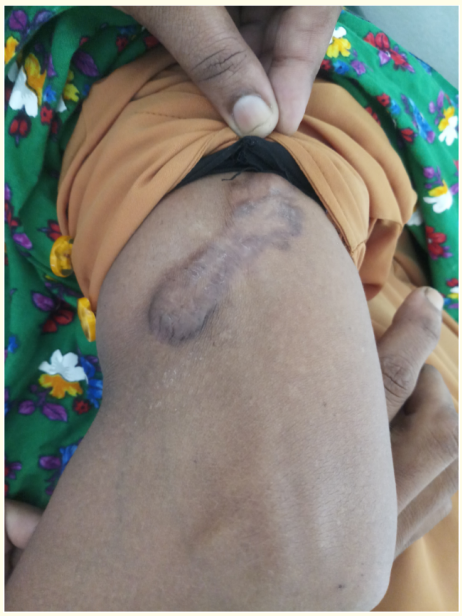

Figure 4

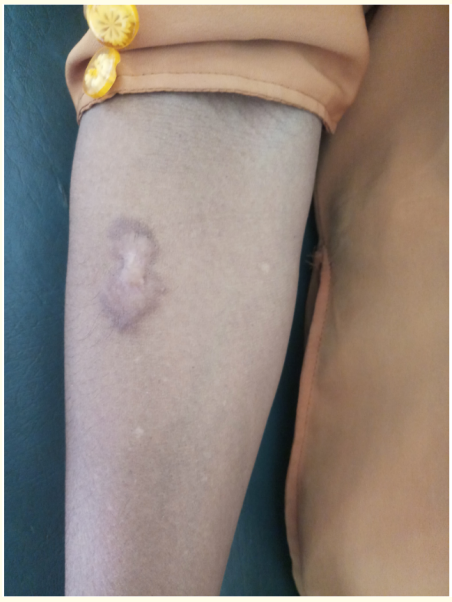

Figure 5

Conclusion

Spontaneous keloids are a challenge for physician to diagnose as the condition is a rare one and minimal injury of biopsy can trigger inflammation. A good history taking and clinical examination and searching for reported syndromes will help in diagnosis.

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