

## CASE REPORT



## Marjolin's Ulcer Over Post Burn Scar : A Rarity

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## Abstract

Marjolin's ulcer (MU) is a cutaneous malignancy that arises over previously injured skin, longstanding scars and chronic wounds. Burn scars are the most common predisposing condition that leads to the development of MU with reported incidence of 0.77 to 2%. Exact etiology for the development of MU is not known. MU is relatively commoner among males than females and affecting all age groups and races. We report a case of Marjolin's ulcer in a 24-year-old woman arising over a long-standing burn scar.

**Keywords:** Tumors; Squamous cell carcinoma; Skin malignancy

## Introduction

Marjolin's ulcer (MU) is a cutaneous malignancy that arises over previously injured skin, longstanding scars and chronic wounds.<sup>(1)</sup> Burn scars are the most frequent inciting condition that leads to the development of MU with reported incidence of 0.77 to 2%<sup>(1)</sup>. Exact etiology for the development of MU is not known. MU is relatively commoner among males than females and affects all age groups and all races.<sup>(2)</sup> The overall mortality rate of MU is reported to be at least 21%.<sup>(1)</sup> We report a case of MU in a young woman in a previous longstanding scar.

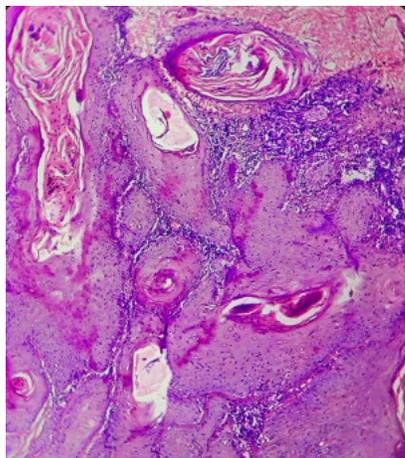
## Case Report

A 24-year-old woman presented with a non-healing ulcer over right forearm for 2 months. She had history of burns over right forearm 15 years back with a resultant scar. Fever, joint pain, constitutional symptoms were conspicuously absent. On examination, a solitary, well-defined, indurated ulcer measuring about 10 X 6 cm was present over the dorsal aspect of distal one third of right forearm (Figure 1). Edges were raised and everted. Pale granulation tissue with minimal slough and bleeding on touch was seen. Regional and generalized lymphadenopathy was absent. Other cutaneous examination, hair, nail, mucosa and systemic examination were normal.



**Fig 1.** A large ulcerative growth over a pre-existing burns scar

Routine hematological, biochemical, serology for infectious diseases and urine examination were normal. Wedge biopsy from a representative site showed well differentiated squamous cell carcinoma (Figure 2). CT scan of right upper limb showed extension of the ulcer till subcutaneous plane. Patient was referred to surgical oncologist for further management.



**Fig 2.** HPE showing atypical cells with Keratin pearls (H & E x 100)

## Discussion

Celsus deserves earliest acknowledgement for recognition of the phenomenon.<sup>(2)</sup> Later on in 1828 French physician

Marjolin classified ulcers as those due to local causes and those secondary to internal causes.<sup>(2)</sup> In 1903, Da Costa coined the term Marjolin's Ulcer to describe malignant degeneration of skin scars.<sup>(2)</sup> Burn scars are the most frequent inciting condition that leads to the development of MU with reported incidence of 0.77 to 2%.<sup>(1)</sup> Other conditions associated with the development of MU includes non healing wounds, venous ulcers, lupus vulgaris, vaccination scars, snake bite scars, pressure sores, osteomyelitis zone, pilonidal sinus, radiotherapy areas.<sup>(3)</sup>

Exact etiology for the development of MU is not known. There is a prolonged latency period between initial insult and development of MU and is inversely related to the patient's age at the time of insult.<sup>(1)</sup> MU is relatively commoner among males than females.<sup>(2)</sup> Affects all age group and all races.<sup>(2)</sup>

Lower limbs constitute the most frequent site followed by upper limb, head and neck, trunk.<sup>(1)</sup> Two clinical variants of MU are Ulcerative variant and Exophytic variant of which Ulcerative variant is common.<sup>(1)</sup> Squamous cell carcinoma is the most frequent histopathological subtype of malignancy followed by Basal cell carcinoma and Melanoma.<sup>(1)</sup> There is no standard treatment guidelines for the management of MU. Management depends on stage of the tumor; in early stage wide local excision followed by grafting is advised, in advanced stages amputation is advised.<sup>(4)</sup>

## Conclusion

Marjolin's ulcers are aggressive and rapidly progressive type of squamous cell carcinoma. This potentially fatal complication may be preventable and treatable by early diagnosis and surgical management. Early excision and long term follow up helps in reducing the mortality associated with the disease.

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