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Marjolin's Ulcer in a Post Burn Scar of the Hand

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ABSTRACT

Marjolin's ulcer arising from a post burn scar is rare. Here, we present a case of an elderly male with a Marjolin's ulcer of the hand arising from a post burn scar sustained two decades ago. The patient was not willing for an amputation, so he was managed with a spit skin graft after explaining the possibility of recurrence.

Keywords: Amputation, Split skin graft, Rare, Squamous cell carcinoma, Regional lymphadenopathy

A 52-year-old male presented to our Department with an ulcer over the index and mid finger for 6 months duration. There was no history of trauma. Past history revealed rescue thermal burns to the same site treated conservatively 20 years back. No history of recurrent ulceration

On examination, an ulceroproliferative growth on the dorsum of index and mid fingers measuring 8 x 6 cm with irregular surface, everted margins, firm in consistency, with induration of the base, friable and bleeding on touch was present [Table/Fig-1]. There was no regional lymphadenopathy.

Routine blood investigations and chest radiograph were normal. X-ray of hand showed no bony involvement. Egde biopsy of the lesion revealed squamous cell carcinoma. The patient was advised amputation of the affected parts which he denied. He was hence explained that a split skin graft would be used to cover the defect, but in case of recurrence, we would proceed for amputation. Therefore, we proceeded with wide local excision and with split skin graft cover [Table/Fig-2] Post-operative was uneventful with good graft take. [Table/Fig-3]. There was no recurrence at 6 years follow-up [Table/Fig-4].

This case report has been published for its rarity. By high clinical suspicion and thorough clinical examination with tissue confirmation by biopsy, this rare case was diagnosed and treated. Meticulous planning in this patient avoided the need for amputation of fingers.

Da Costa [1] was the first to coin the term Marjolin's ulcer in 1903 to describe malignant degeneration of cutaneous scars especially the post-burned scars. Marjolin's ulcers are epidermoid carcinomas developing in non healing scar tissue. Causes include long standing ulcers, post burn scars, sinuses, pressure sores and osteomyelitic sites. In general, the post-burned wounds and scars contribute to 2% of all squamous cell carcinomas and 0.03% of all basal cell carcinomas of the skin [2]. Marjolin's ulcers is commoner in males with an average latency period to malignant transformation of 35 years [3,4]. Depending on the latency period, the Marjolin's ulcers are subclassified into acute and chronic subtypes. Clinically, Marjolin's ulcers presents in two major morphologic forms [5]. The commoner form is the flat, indurated, infiltrative, ulcerative variant having a better prognosis while the other less frequent form is the exophytic papillary variety with a poorer prognosis. Lower limbs constitute the most frequent site of Marjolin's ulcers (43.7%). The other sites affected include head and neck region (22.4%), upper limbs (22.4%), trunk (11.5%) and other body parts [6]. Marjolin's ulcers have been reported in post burned scars at rare locations such as the nose [7]. The classic triad of nodule formation, induration, and ulceration at the post-burned scars should prompt a biopsy to confirm the diagnosis [8]. Other clinical signs include everted or rolled margins, exophytic granulation tissue, increasing size, bleeding and regional lymphadenopathy. Once the biopsy confirms the diagnosis of Marjolin's ulcers, MRI is the ideal imaging tool for evaluation of the status of the soft-tissues, infiltration of any underlying bone and the involvement of adjacent neurovascular structures [9]. At presentation, regional lymph nodes are involved in 20%-36% of the patients [10]. Distant metastases are reported among 14% of the patients [6]. Metastasis is primarily to the regional lymph nodes, but involvement of organs such as the liver, lung, brain, kidney may also occur [5]. Surgery constitutes the mainstay of treatment with a 2-4 cm horizontal clearance margins, and vertical clearance of the un-involved next barrier structure. The ensuing raw areas are either skin grafted or covered with a flap. Adjuvant radiotherapy and chemotherapy have a role in managing these malignancies. The overall mortality rate of Marjolin's ulcers is reported to be at least 21% [6].




[Table/Fig-1]: Pre-operative clinical photograph showing the lesion **[Table/Fig-2]:** Post excisional defect **[Table/Fig-3]:** Good split skin graft take **[Table/Fig-4]:** Well settled split skin graft at 6 years follow-up

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