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A Case Of Marjolins Ulcer Arising From Chronic Scar Post Burns: A Case Report

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1. INTRODUCTION

A Marjolin ulcer, named after French surgeon Jean Nicolas Marjolin, historically referred to a squamous cell carcinoma within a burn scar, but the definition evolved to incorporate all skin malignancies arising within damaged tissue. Squamous cell carcinoma remains the most common malignancy, but many cutaneous cancer types have been identified in inflamed or injured tissue, including trauma, osteomyelitis, and chronic ulcers.[1][2]. Marjolin ulcers can occur many years, even decades, following the initial injury. Marjolin ulcers most commonly arise from burn scars.[3] 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.[11]

2. CASE REPORT

A 63-year-old male patient presented to the hospital with chief complain of painful lesion in back of left knee for 2-3 months. It started as solitary small ulcer in left popliteal fossa which gradually increased to verrucous lesion of current size. On examination single 7x3 cm exophytic lesion with well-defined borders, sessile base and contracture present on underlying skin. The lesion was painful on touch and knee joint movement and does not bleed on touch. Patient had h/o burns 20 years ago which was managed conservatively Patient was examined thoroughly clinically and he didn't have any other similar lesions and no lymphadenopathy

MRI suggestive of exophytic cauliflower like altered signal intensity growth appearing heterogeneously isointense on t1/t2, hyperintense on PFDS, shows diffusion restriction with no evidence of blooming and heterogenous post contrast enhancement noted arising from dermis of popliteal fossa with features s/o verrucous lesion. Biopsy s/o squamous papilloma. Patient underwent wide local excision of lesion with 2cm margin of normal skin. Patient underwent STSG over healed raw area 20 days later and he was followed up routinely for 3 months. HPR report was suggestive of verrucous (very well differentiated squamous cell carcinoma)

3. DISCUSSION

Marjolin ulcers most commonly arise from burn scars.[3] Malignant degeneration occurs in 0.7% to 2.0% of burn scars that have been allowed to heal by secondary intention.[6][7] The cutaneous squamous cell carcinoma is the second most common cutaneous malignancy with increasing incidence every year. The burn scar is one of the risk factors that may transform into an aggressive type of cutaneous malignancy called Marjolin's ulcer. It accounts for 0.05% of all squamous cell carcinomas of the lower limb and about 2% of burn scars undergoing malignant transformation [9][10]. Prevention and early detection of Marjolin ulcer is the best practice. Prevention includes excision and reconstruction or regular surveillance of burn scars and other chronic wounds.[4] There is no standardized treatment protocol for a Marjolin ulcer.[3] The most common treatment for nonmetastatic disease is wide local excision with 2 cm to 3 cm margins, with most clinicians recommending 3 cm margins, ideally with intraoperative frozen sections to confirm negative margins. Lesions within the subcutaneous layer are excised to the fascia, and those invading fascia or muscle are excised to the periosteum. Amputation is reserved for bony involvement or any advanced-stage disease when wide local excision is not possible.[5] No role of chemotherapy as adjuvant therapy could be confirmed in the literature for Marjolin's ulcer[8]

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.

Abbreviations

MU-marjolin's ulcer

STSG-split thickness skin grafting

HPR- histopathology report

MRI-magnetic resonance imaging

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