

Marjolin's ulcer developed on chronic radiodermatitis:A case report

Case Report

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Abstract

Marjolin's ulcers are scar carcinomas most often arising in old burn injuries. They arise mostly in the extremities. We report a case of Marjolin ulcer type is a Poorly differentiated squamous cell carcinoma, developed on chronic radiodermatitis postauricular, of a 58-year-old male patient treated 7 years before for carcinoma of the parotid with radiotherapy.

Keywords

Marjolin's ulcer, chronic radiodermatitis, Chronic skin disease.

Introduction

Marjolin's ulcer is an aggressive ulcerating cutaneous malignancy that may arise in chronically inflamed or traumatized skin. but they are also seen in traumatic wounds, venous stasis ulcers, pressure sores, osteomyelitic fistulas, and chronic radiation. The classic description is of an Squamous Cell Carcinoma (SCC), but other cancers have also been reported. Marjolin's ulcers are more aggressive than primary cutaneous cancers and have higher rates of local recurrence and metastasis.

Case report

A 56 year-old man diabetic followed in ENT for carcinoma of the non-metastatic parotitis put under localized radiotherapy with good improvement, presented after 10 sessions a radiodermatitis, the evolution was marked 1 year later by the oozing and not scarring of the burn with an extension of the lesion. The dermatological examination revealed a 12cm ulcer of large axis poorly limited to a basement fibrinous bottom with an infiltrated base sitting in left retroauricular, with at the dermoscopy:

vascularization of hairpins surrounded by a whitish halo and hemorrhagic crust (Figure 1).

The remainder of the somatic examination was normal. A skin biopsy was performed in favor of a slightly differentiated squamous cell carcinoma (Figure 2). A search for secondary localization was performed, which revealed a secondary lymph node location and the patient was put on chemotherapy.

Discussion

Marjolin ulcers (UDM) is all malignant tumors developed on unstable scars, resulting from chronic inflammation, traumatic wounds .Historically, Marjolin ulcers are named for French surgeon Jean Nicolas Marjolin and first described as ulcerations with dense villi arising within a burn cicatrix. Burn scars are the most common inciting condition that leads to the development of Marjolin ulcers. Other chronic inflammatory etiologies that lead to Marjolin ulcers include traumatic wounds, venous stasis ulcers, osteomyelitis, pressure ulcers, radiation



Figure 1: Marjolin ulcer on the left retroauricular. A 12 × 9 cm ulcer with exophytic growths, clean wound bed, no signs of infection, and painless.

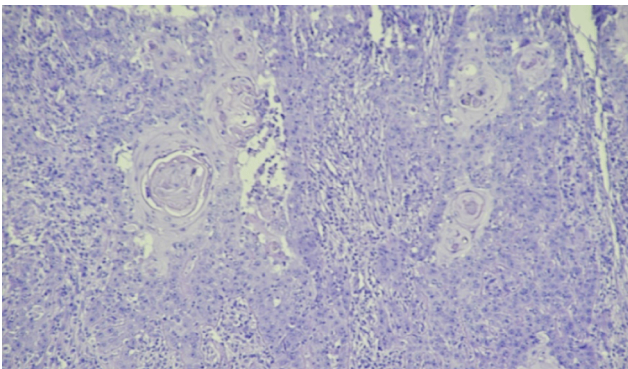


Figure 2: Differentiated squamous cell carcinoma.

Dermatitis as the case of our patient [1-4]. The average latency period from the time of the initial inciting wound to the discovery of malignant degeneration is between six weeks and 35 years. The classic description is of an SCC, most lesions are well-differentiated, but poorly differentiated subtypes have also been identified. Although other cell types have been described (basal cell carcinoma, melanoma and sarcoma [5]). Lesions can occur

anywhere but most frequently affect the lower extremities [6], followed by the scalp, upper extremities, torso, face and neck [7,8], as illustrated in our patient.

The pathophysiology of Marjolin's ulcer has been discussed for over 100 years. Various aetiological factors are responsible for malignant transformation. These include areas of chronic scar tissues that may lose cells of the immune system constituting part of skin physiology. Due to this, malignant cells may avoid immunological detection and may become more aggressive and prone to metastasis. But other factors are also responsible, chronic irritation, repeated re-epithelization, genetic predisposition, and toxins from local cell damage [9].

Clinically the lesions have been described as ulcerative and foul-smelling with rapid growth and rolled, elevated margins. But other clinical signs that suggest Marjolin ulcer formation include exophytic granulation tissue, bleeding appearing in a chronic wound or scar, and regional lymphadenopathy. However any suspicious nonhealing or ulcerative lesion that appears in a chronic scar should be biopsied to confirm the diagnosis.

Due to their greater aggressiveness in comparison to other skin neoplasms, Marjolin's ulcers require well designed treatment plans in order to optimise the patient's medical care and his/her chances for survival. Metastases are the most important prognostic factor; regional may affect 20-66% of cases [10-12] distant - 14% (lungs, brain).

However, management should focus on prevention as unresected burn wounds that heal by secondary intention are at increased risk for malignant degeneration. Once discovered, no definitive treatment protocol exists for the management of Marjolin ulcers. The current standard of treatment for all histopathological forms of Marjolin's ulcer is wide local excision 1 to 2 cm margins. In advanced cases, limb amputation proximal to the lesion is needed to control the disease. Prophylactic lymph node dissection is controversial, but in the future sentinel lymph node biopsy may serve as a diagnostic tool. Additional treatment (neoadjuvant or adjuvant therapy), such as radio, chemotherapy and/or targeted therapy, is recommended in patients with unfavourable prognostic factors or remote metastases [2,13]. After treatment, follow-up surveillance should occur at regular intervals

with a primary care provider or dermatologist to note any evidence of recurrence.

Conclusion

Malignant degeneration in chronic wounds is a very rare, aggressive form of Marjolin's ulcer. Prevention and management of Marjolin ulcers require a multidisciplinary team approach, including providers from surgery, primary care, oncology, and dermatology. But the treatment is first of all preventive. Increased oncological alertness should be displayed by nursing and medical personnel taking care of patients with chronic wounds. Otherwise, early diagnosis of wounds developing in damaged skin, including histopathological examination, decreases the risk of tissue destruction and extensive surgical resection.

Our observation is original by the isolated location of the UDM at the retroauricular level and their occurrence on chronic radiodermatitis. To our knowledge which has never been reported in the literature.

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