SQUAMOUS CELL CARCINOMA IN A LAPAROSTOMY SCAR

Carcinoma epidermóide em cicatriz de laparostomia

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INTRODUCTION

Abnormal wound healing can lead to malignant transformation. Squamous cell carcinoma arising from a chronic nonhealing wound is called Marjolin’s ulcer, and this process is mostly associated with burn wounds. Marjolin’s ulcer, as opposed to spontaneous skin cancer, is more likely to occur in the extremities, and has a highly aggressive pattern, with 27.5 percent of patients developing metastasis. The last step of the pathological healing process is the malignant transformation.

The lack of adequate early wound care, including early skin graft when needed in burn wounds, favors malignant degeneration. Some authors suggest that late presentation for medical treatment is a major factor in its untreatability. The latency period of malignant transformation in chronic wounds is wide. The precise pathogenesis of Marjolin’s ulcer is unknown, although there are some theories involving chronic inflammation, DNA damage, carcinogenic toxins, dividing cells susceptible to mutations and immunodeficiency.

Is presented here an unusual case of abdominal wall squamous cell carcinoma in a laparotomy scar.

CASE REPORT

A 61-year-old male who underwent laparostomy following an acute complicated appendicitis 13 years ago came complaining of ulceration for six months, progressive growth and bleeding from the wound for two months. There was also purulent discharge. An incisional hernia was present for six years (Figure 1). The lesion was described as large, ulcerated and easily bleeding, and no lymphadenopathies were found. An abdominal wall hernia was also present.

The computed tomography scan showed post-operative changes in the anterior abdominal wall, identifying expansive sessile lesion, about 7.4 X 3.0 cm. There was no invasion, enlarged lymph nodes or distant metastasis.

A biopsy was performed and diagnosed a well differentiated squamous cell carcinoma. Was performed wide excision of the lesion with safety margins and repaired the hernia, placing pre-peritoneal polypropylene mesh. Pathologic interpretation of the surgical specimen revealed a well differentiated squamous cell carcinoma, with invasion of dermis and hypodermis and free surgical margins.

He was discharged in a good condition on the 10th day post-operatively. The patient has remained free of disease during the last 12 months of follow-up.

DISCUSSION

The average latency period of Marjolin’s ulcer is very wide, it can vary greatly, and it is described as inversely proportional to the patient’s age at the time of injury. Several histologic types have been described, such as sarcoma, basal cell carcinoma and the squamous cell carcinoma.

The prevalence of metastasis to regional lymph nodes at the time of diagnosis is the most important...
prognostic indicator. The most common metastasis sites are bone, lung, liver, kidney and brain. Lower extremities have the highest metastasis rates and thus the lowest survival rates\(^3\).

Some etiological factors may be involved, such as decreased immunologic tissue surveillance due to dense scar tissue, chronic inflammation, release of local carcinogenic toxins, presence of rapidly dividing cells susceptible to mutations and decreased vascularity. But still no concrete mechanism for the development of carcinoma in injuries has been discovered\(^2\).

Patients usually present complaining of increased, often foul-smelling putrid discharge or bleeding, pain, and a fast growing lesion from a chronic nonhealing wound or scar, with granulation tissue.

The diagnosis is based on the pathologic interpretation of biopsy specimens, and it can be delayed by confounding characteristics of benign and malignant ulcers. Marjolin’s ulcer seems to affect mostly disadvantaged patients with limited access to health care and neglected wounds, which often delays presentation, especially in developing countries\(^5\).

Wide excision is recommended with large safety margins (2 to 3 cm) and closures of chronic skin wounds, and when this is not feasible, close evaluation. Lymph node excision should be done when nodes are palpable, and some authors have advocated the use of sentinel lymph node biopsy. Sentinel lymph node evaluation has not yet proved useful in patients with squamous cell carcinoma.

Cases of squamous cell carcinoma arising in the abdominal wall from a laparotomy (non burn scar) are extremely rare. Was conducted a literature review and was found only one case report, this being the second report in the literature.

REFERENCES