

Squamous Cell Carcinoma in a Case Report

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Abstract: We present a clinical case of the diagnosis of a large squamous cell carcinoma in the emergency department. The case shows a failure of primary detection of this type of cancer in primary care. Squamous cell carcinoma is a serious public health problem, which is a preventable tumor since it is associated with sun exposure. The population must be educated to protect themselves from prolonged exposure to the sun. The diagnosis is obtained through histological biopsy study. Lymphatic or perineural dissemination may occur. Treatment depends on factors such as tumor size and whether or not there is distant involvement.

Key words: cutaneous squamous cell carcinoma; photoexposure; surgery; radiotherapy

1. Introduction of Clinical Case

A 53-year-old male patient presented with a mass in the epidermal area of the left shoulder with more than one year of evolution. The patient came to the Emergency Department of the Hospital of Orihuela, because he had pain and suppuration of an epidermal area of more than 13 cm in diameter located in the area of the left shoulder. The patient's profession is a butcher. According to the patient, the lesion has been evolving for more than a year. He went several times to his family doctor who referred him to the dermatology office, but the latter was overcrowded and there was no possibility of being evaluated by the specialist. Finally, the patient decided to go to the emergency department due to the suppuration and ulceration of the lesion. The lesion has a discoid aspect of irregular mameloned contours with ulcerated center and purulent suppuration. It has a diameter of about 13 cm. X-rays of the shoulder and thorax were performed to rule out bone involvement. Bone involvement was not observed and there was good mobility of the shoulder without loss of angles of movement. The patient has a phototype I and reports that the lesion has been growing progressively for a year. The patient was referred urgently to the dermatology department. The patient came to the dermatology office and a biopsy was performed to determine the histological type and a magnetic resonance imaging.

The biopsy results showed that the tissue slice showed skin fragments, no changes in the epidermis, ulcerated areas, and superficial and deep lymphatic perivascular inflammatory infiltration in the dermis. Local vasculitis was observed, and no tumor lesions were observed. The MRI report is a large ulcerative and stony skin tumor associated with epidermoid carcinoma located in the posterior lateral area of the left shoulder. It is approximately 10 × 3.5 × 11 cm long and enhances after intravenous injection of contrast agent. This kind of injury spreads deeply, invading the entire thickness of

subcutaneous cell tissue, without obvious fascia or underlying muscle intestinal infiltration. No areas of bone edema were observed, no joint effusion was observed, and no collection was made in the sublingual gland and sublingual gland sac. Mild degenerative changes in the acromioclavicular joint. The rotator cuff muscles are normal with no signs of atrophy or fat infiltration. A large left supraclavicular gland lesion with a short axis of up to 20 mm and unilateral axillary adenocarcinoma with a short axis of 16 mm have been identified.

Lymph node biopsy is performed and reported as: lymph node biopsy showing tumor infiltration arranged in plaques, nests and cords, among which there is a somewhat fibrous stroma, whose cells show hyperchromasia and nuclear pleomorphism, some prominent nuclei and mitosis. There are focal signs of keratinization with few dyskeratotic cells and isolated corneal pearl. Immunohistochemistry was negative for melanoma marker and positive for CCKAE1/AE3, p40, p63.



Figure 1. A mass in the epidermal area of the patient's left shoulder.

2. Squamous Cell Carcinoma

The case shows a clear failure of primary care to promptly refer this patient for evaluation by the dermatology department. The delay in the evaluation by dermatology has meant a loss of opportunity in the treatment of this patient due to the excessive growth of the tumor size. The therapeutic possibilities proposed in this case are surgery to remove the tumor, radiotherapy and immunotherapy.

The skin is the largest organ and is the indispensable outer covering that insulates us from the environment. It is made up of three very different and closely related layers. The outer layer is the epidermis, the dermis is the intermediate layer and the hypodermis is the deepest and largest.

Any structure of the skin can be the object of the tumor process. Most tumors are often located in the outermost layer: the epidermis. The most common cancer is basal cell carcinoma, so named because it originates from the basal cells in the deepest layer of the epidermis (basal layer); Squamous cell carcinoma (epidermis) and melanoma originate from melanocytes, which produce melanin.

From the epidemiological point of view, squamous cell carcinoma is considered the main keratinizing cell neoplasm of the epidermis and the most frequent tumor of semimucosa and orogenital mucosa. This neoplasm has been considered a public health problem, since it corresponds to the most frequent group of malignant tumors worldwide.

The higher incidence of squamous cell carcinoma in men is related to photoexposure. The main etiological factor of squamous cell carcinoma is exposure to ultraviolet radiation, so that all those factors that increase the time of exposure of the skin surface or decrease the protective mechanisms against damage caused by ultraviolet radiation are the main risk

factors for the development of squamous cell carcinoma. Professionals who work with chronic exposure to the sun have a higher prevalence of squamous cell carcinoma. Immunity is the main brake on the progression of squamous cell carcinoma so that deficits in the function of the immune system determine an increased risk for the development of squamous cell carcinoma. The increasing use of immunosuppressive drugs in solid organ recipient patients may lead to an increase in the prevalence of squamous cell carcinoma.

The choice of treatment should be guided by the location, number and size of the lesion, availability of therapy, experience of the treating physician, patient factors (age, immune status, concomitant medication and comorbidities), cosmetic results and patient preferences.

The different treatment options for squamous cell carcinoma are conventional surgery, which is the standard treatment, and others including Mohs micrographic surgery, curettage, cryosurgery, CO₂ laser, radiosurgery, photodynamic therapy, topical fluorouracil, topical imiquimod, and local injections of interferon alpha or bleomycin.

3. Conclusion

Squamous cell carcinoma is a skin cancer that has a high public health impact worldwide, as it is the second leading cause of death from skin cancer, followed by melanoma. It is expected that in less than ten years the incidence of this disease will double. It is a highly preventable disease since the major risk factor is exposure to ultraviolet radiation. The population should be educated about the methods of prevention of squamous cell carcinoma by means of sun protection, such as sunscreen, umbrellas, hats, etc. It is important to educate patients about the importance of avoiding exposure to the sun, thus reducing the risk of developing the disease.

The definitive diagnosis is established through biopsy of the lesion and subsequent histopathological evaluation. The treatment of choice is surgical intervention, with the Mohs technique being considered the preferred approach due to its lower recurrence rates compared to other methods. For patients who are unable to undergo surgery, either due to refusal or unresectable tumors, radiotherapy is utilized as a first-line treatment or as a complementary or palliative option.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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