Cutaneous metastasis from head and neck cancers are rare but, when present, they are usually considered a poor prognostic sign. We report a patient who showed multiple skin metastases 28 months after the diagnosis and treatment of a laryngeal carcinoma. A 57-year-old male with past history of smoking, was referred to our department in 2015 for the presence of 21 skin tumors, varying in size between 0.5 and 2 cm, red-pink in color, depressed center, located on the scalp, face, trunk and limbs.

In 2012, the patient underwent total laryngectomy followed by chemoradiotherapy for a squamous cell carcinoma of the subglottic larynx stage IV (T4N2MX).

The histopathological exam (double biopsy one from the scalp and the other from the right thigh) shows proliferation of malignant tumor cells arranged in islands in deep dermis, cells with marked atypia, multiple atypical mitoses and unicellular keratinization.

Based on clinical and paraclinical examinations we established the diagnosis of cutaneous metastases with laryngeal neoplasm starting point, excluding other conditions that might be confused from clinical point of view. After confirmation of the cutaneous metastasis, the patient was directed the Oncology Department for adequate treatment.

The clinical polymorphism of cutaneous metastasis raises numerous problems of clinical diagnosis, leading to significant delays in diagnosis and initiation of treatment.
Introduction

Cutaneous metastases are encountered in 0.7-9% of all skin tumors [1].

Cutaneous metastasis from head and neck cancers are rare but, when present, they are usually considered a poor prognostic sign. The incidence of cutaneous metastasis from head and neck squamous cell carcinoma (SCC) is less than 1% [2].

Clinical case

A 57-year-old male, with past history of smoking, presented in 2015 in our department with 21 skin tumors, varying in size between 0.5 and 2 cm, red-pink in color, depressed center, some of them covered by purulent deposits and hematic crusts, other with keratotic surface. The tumors were located on the scalp (13), face (1), trunk (2) and limbs (5) (Figure 1-3).

The patient affirms that the tumors appeared about six months ago, initially on the left hand (index), with rapid extension at the regions previously described.

In 2012 our patient underwent total laryngectomy extended to the first tracheal ring with jugular and carotid lymph node dissection followed by chemoradiotherapy for a squamous cell carcinoma of the subglottic larynx stage IV (T4N2MX). The pathological examination confirmed the diagnosis of moderately differentiated squamous carcinoma.

There were no other known environmental and family risk factors.

At clinical examination the patient was afebrile and appeared pale and debilitated with marked asthenia. He had a palpable, mobile and painful left retromandibular lymphadenopathy and right supraclavicular lymphadenopathy. We also retained the presence of a tracheostomy tube. The patient is Fitzpatrick skin type III. The patient had undergone severe weight loss.

Dermoscopic examination of skin tumors revealed the pink homogeneous structureless areas, serpentine and linear irregular vessels asymmetrically distributed, polymorphic vessels (dotted vessels, comma-like vessels, hairpin vessels) (Figure 4).

The histopathological exam (double biopsy one from the scalp and the other from the right thigh) shows proliferation of malignant tumor cells arranged in islands in deep dermis, cells with marked atypia, multiple atypical mitoses and unicellular keratinization (Figure 5,6). This aspects confirm the metastases of squamous cell carcinoma.

Routine hematological investigations did not reveal any pathology other than severe anemia (Hb...
Biochemical parameters and routine urine examination were normal. HIV and VDRL tests were negative.

Ultrasoundography of superficial lymph nodes: retromandibular lymphadenopathy 13/5 mm in diameter and right supraclavicular lymphadenopathy of 10/5 mm diameter. CT scan found tissue nodules on both lung fields, multiple supratentorial brain metastases with maximum axial diameter of 14 mm and perilesional edema. Based on clinical and paraclinical examinations we established the diagnosis of cutaneous metastases with laryngeal neoplasm starting point, secondary severe anemia and also brain and lung metastases. After confirmation of the cutaneous metastasis, the patient was directed to Oncology Department for adequate treatment.

Discussions

SCC is the most common tumor in upper respiratory tract being also the primary cause of carcinoma of the larynx in adults [3]. Distant metastases in SCC of the larynx occur with an incidence of 6.5-7.2% and the most frequently involved organs are the lungs, the liver and the bones [1,4]. Cutaneous metastases, when they occur, are usually located on the neck, chest, scalp, face, arms and fingers [3]. The mechanism of skin metastasis in squamous cell carcinoma of subglottic larynx is not fully understood. There are three possible mechanisms: direct spreading, lymphatic and hematologic spreading. Direct spreading is made by direct invasion of the surrounding tissues. Spread through dermal lymphatics can result in the development of cutaneous metastases. The hematogenous spread is made by pulmonary circulation or by azygos and vertebral venous plexus [6].

The clinical picture of cutaneous metastasis varies from macules, infiltrated or indurated plaques, discoid lesions, nodular tumors with telangiectasias, bullous or papulosquamous lesions, to scarred plaques or pigmented tumors [7].

Cutaneous metastases are mostly multiple and rarely solitary, as was seen in our case [8].

In all cases, a high index of clinical suspicion is mandatory for diagnosis of skin metastases. As a rule, biopsy is mandatory in patients with a history of cancer, especially if there are associated symptoms like weight loss, fatigue or severe anemia [9].

Based on clinical exam and paraclinical explorations we excluded the following diagnosis: skin cancers (basal cell carcinoma, sarcoma, etc.), eruptive keratoacanthoma, cutaneous pseudolymphoma, cutaneous manifestation of leukemia.

Cutaneous metastases are early indicators for invasive metastatic cancers and usually are associated with limited survival period [10]. Rarely they can
be the first sign of an unknown malignancy [11]. In our case, the primitive tumor was already known.

In 80-85% of cases, the laryngeal cancer diagnosis is established in advanced stages (stage III, IV), situation encountered also in our case.

In stage III and IV of subglottic larynx cancer the 5-year relative survival, is 32-47% [12]. In our case, the prognosis is poor, given the large number of cutaneous metastasis and due to the presence of visceral metastases.

In patients with laryngeal cancer the risk of developing the second tumor is estimated at 10-24% of cases [13].

There is no agreed consensus in the management and treatment of cutaneous metastasis with laryngeal neoplasm starting point. Treatment and prognosis depend mainly on the type and stage of the primary tumor, cutaneous metastases usually being associated with poor prognosis.

In case of multiple cutaneous metastases the aim of the treatment is to provide symptomatic relief and to improve the quality of life.

In the case of disseminated disease with multiple skin metastases, the treatment is mainly palliative including surgery, hypofractionated radiation therapy, chemotherapy, and their combinations [14,15].

The median overall survival is significantly improved (by 2.7 months) after the administration of cetuximab with platinum/SFU versus chemotherapy alone, [16,17]. Photodynamic therapy and carbon dioxide laser therapy also can be useful for palliation of skin metastases [18,19].

An early diagnosis and a good follow-up can help greatly in reducing morbidity and mortality.

Conclusions

The clinical polymorphism of cutaneous metastasis raises numerous problems of clinical diagnosis, leading to significant delays in diagnosis and initiation of treatment.

Although the disease depends on the underlying malignancy and its therapeutic response, cutaneous metastases are usually associated with poor prognosis.

The authors have declared no conflict of interest.


