Cutaneous metastases in 42 patients with cancer

Sir,

Cancer metastases are considered as the most devastating phase of malignancies.[1] Metastasis is defined as a neoplastic lesion arising from a malignant tumor which is not in contiguity or in close proximity with the same tissue.[2] Although there are many frequent locations, the incidence of cutaneous metastases is rare and account for nearly 0.7-9% of all tumoral implants[3] and in approximately 80% of the cases skin metastases (SM) are developed in the

subsequent evolution of the primary tumor.[3] In few cases, they are the first evidence or a sign of recurrence of a known tumoral disease. This fact implies that although there are several morphological types of SM, in current clinical practice, it is not generally performed confirmatory biopsies. In these cases, the diagnosis is based on clinical appereance. Although the most common lesions are multiple or solitary infiltrating papules and/or nodules which might be easy to diagnose, there are also other variants which are rare such as alopecia neoplastica, zosteriform pattern or chest armor or the interesting variants mimicking radiation dermatitis which have been reported barely and they could be difficult to diagnose without histopathological study. These variants have a poorer prognosis and are due to the spread of the malignant cells along the subcutaneous lymphatics leading to blockade of the lymph ducts.

Generally all these lesions are considered a grave prognostic sign[3] due to coexistence with visceral lesions (lung, liver or other multiple organs). The most common sites affected are the head (50%) followed by the trunk (40%) and extremities (10%).[4,5] These lesions are the result of skin infiltration by a distant neoplasia.[1-3] Although melanoma is the most common origin, it is preceded by other tumors, being the most frequent correlated with the most common cancer in each sex.[6] Globally, breast cancer is the second etiology of SM and these lesions usually occur in the skin overlying or proximal to the area of the primary tumor.[7]

With this background, we can conclude that it could be relevant to know the incidence and most common pattern of these lesions in our institution to facilitate the rapid recognition and the prompt treatment of SM and the global neccessity of diagnostic biopsies.

With this aim we have conducted recently a descriptive retrospective analysis of clinical and histopathological data of all patients diagnosed with skin metastases between January 2005 and December 2008 in our department. We tried to describe the most frequent origins of these lesions in our environment, to describe its clinical appereance and the necessity of diagnostic biopsies.

We detected 42 patients out of 700 revised (6%) (male 28, female 14) with a median age of 54 years (range, 31-76 years). The most common primary tumor in men was melanoma (32%) followed by gastrointestinal adenocarcinoma (26%). In women the most common primary tumor was breast cancer (41%), followed by melanoma (33%). In 4 patients it was impossible to identify the primary tumor. In these cases skin metastases were the only evidence of malignant disease.

Although there are several variants of cutaneous metastases based on its appereance, the most common clinical presentation in our study was asymptomatic subcutaneous solitary nodule (34%), followed by multiple painful and/or burning nodules (13%). One patient had multiple and painful/burning papules and nodules occupying the whole area of the primary breast cancer and the skin over the contralateral breast prosthesis following a prior breast cancer [Figure 1a and 1b] and another had a metastasis mimicking radiation dermatitis eighteen months after she had ended adjuvant radiotherapy for breast cancer [Figure 2].[8] These two patients presented multiple lung and mediastinal nodes metastases and the last one also bone metastases. In both of these patients SM were the first sign of recurrence. Only in 3 patients the SM were the first sign of tumor disease.

The relationship between primary tumor and clinical type of metastases are described in Table 1.

Biopsies were performed in those 12 patients (28,5%), whose pathological findings were positive for melanoma followed by carcinoma. Whereas, in 31 patients SM were associated with visceral and lymph node metastases.

In our study, we obtained a mortality rate at three and six months after diagnosis of SM of 18% and 36%, respectively. The most usual type of treatment is systemic therapy according to the histopathological type of tumor disease and the overall prognosis depends on the pathology and biological behavior of the primary neoplasm and its response to the treatment. However, as a rule it is established that the expected survival is less than 1 year after the diagnosis.

The SM usually appear in advanced stages of cancer or as a mode of recurrence of a known tumor disease making relatively easy the diferential diagnosis based on clinical appereance. In very few cases they are the first evidence of neoplasm.

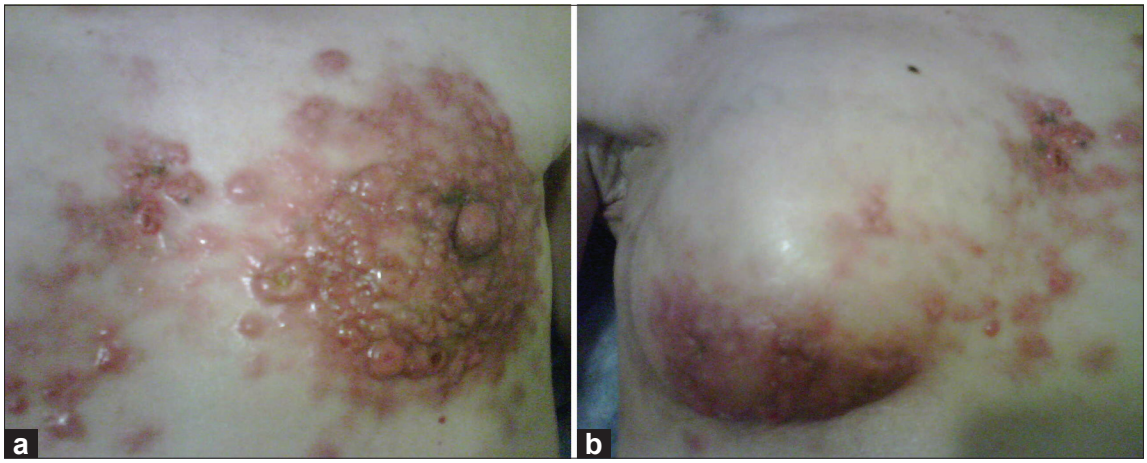

Figure 1: (a and b) Image showing multiple papules and nodules occupying the whole area of the primary breast cancer and the skin over the contralateral breast prosthesis following a prior breast cancer

Figure 2: Image showing a metastasis mimicking radiation dermatitis after adjuvant radiotherapy for breast cancer

Table 1: The relationship between primary tumor and clinical type of metastases

	Hombres	Mujeres	Predominant type of metastases
Melanoma	9	5	Multiple subcutaneous nodules
Gastrointestinal adenocarcinoma	7	1	Asymptomatic subcutaneous solitary nodule
Breast carcinoma	0	6	Multiple subcutaneous nodules
Unknown primary tumor	2	2	Multiple subcutaneous nodules
Genitourinary tumors	4	0	Asymptomatic subcutaneous solitary nodule
Lung carcinoma	6	0	Multiple painful and/or burning nodules

Although generally they have poor prognosis, we have obtained a very low survival rate, poorer than the survival reported in other studies,[3,5] probably because of the multiplicity of lesions and associated visceral injuries in the population studied. Other studies have reported an overall survival at 1, 3 and 5 years of 50%, 20% and 0%, respectively. This overall survival rate varies with the presence or the absence of disseminated disease.

Despite of these results, we are convinced with the relevance to start early treatment in order to avoid complications such as ulceration, pain, infection or others which could deteriorate the quality of life of these patients.

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REFERENCES

1. De Vita VT, Hellman S, Rosemberg SA. Treatment of Metastatic Cancer. In: De Vita, editors. Cancer: Principles and Practice of Oncology, 6th ed. Philadelphia, VT Lippincott Williams and Wilkins; 2001.
2. De Vita VT, Hellman S, Rosemberg SA. Principles of Medical Oncology. In: De Vita, editors. Cancer: Principles and Practice

of Oncology, 6th ed. Philadelphia, Lippincott Williams and Wilkins; 2001.
3. Naser AMB, Zaki MS, Brunner M, Wollina V, Zouboulis CC. Cutaneous metastasis in internal malignancy. Egypt Dermatol Online J 2007;3:1.
4. Brenner S, Tamir E, Maharshak N, Shapira J. Cutaneous manifestations of internal malignancies. Clin Dermatol 2001;19:290-7.
5. Krathen RA, Orengo IF, Rosen T. Cutaneous metastases: a meta-analysis of data. South Med J 2003;96:164-7.
6. Lookingbill DP, Spangler N, Sexton FM. Skin involvement as the presenting sign of internal carcinoma: a retrospective study of 7316 cancer patients. J Am Acad Dermatol 1990;22:19-26.
7. Prabhu S, Pai SB, Handattu S, Kudur MH, Vasanth V. Cutaneous metastases from carcinoma breast: The common and the rare. Indian J Dermatol Venereol Leprol 2009;75:499-502.
8. Gugle A, Malpathak V, Zawar V, Deshmukh M, Kote R. Carcinoma erysipeloides: An unusual presentation mimicking radiation dermatitis. Dermatol Online J 2008;14:26.