INTRODUCTION

Breast cancer (BC) is the most frequent malignant neoplasm in the female population and is associated with a high mortality rate. Cutaneous metastases are a possible sign of advanced and widespread disease. Scalp metastases of BC are uncommon, and they may represent a diagnostic challenge and a warning signal, as they are associated with disease progression and recurrence after treatment. We present a case of scalp metastases by BC where trichoscopy showed characteristic features that can help a clinician in diagnosis.

CASE REPORT

A 69-year-old woman with invasive ductal breast cancer (BC) presented with a 3-month history of asymptomatic patchy hair loss. Clinical examination showed multiple, well-demarcated, nonulcerated, erythematous, 1–2 cm alopecic plaques of the scalp [Figure 1]. Trichoscopy revealed diffuse erythema and small erosions within the alopecic areas and peripheral black dots (BDs). Higher magnification (×40–×70) highlighted an atypical vascular pattern, with dilated, serpentine, and polymorphic vessels [Figure 2].

Histopathology confirmed the diagnosis of BC metastases. A positron emission tomography/computed tomography scan detected disease progression with visceral and bone invasion.

DISCUSSION

BC is the most frequent cancer in women. Scalp and cutaneous metastases may indicate widespread disease...
although the incidence of scalp involvement as the first site of BC recurrence is only 0.025% according to a recent meta-analysis.[3,4]

Cutaneous metastases often mimic other skin lesions, such as malignant melanoma, cysts, pyogenic granuloma, and dermatofibromas. Trichoscopy of scalp metastases has never been described.

Firm erythematous plaques, irregular vascular pattern with serpentine, and polymorphic vessels have been observed in cutaneous metastases.[3] In our case, we had additional trichoscopic clues: hair loss and peripheral BDs. BDs are a nonspecific sign of acute follicular injury, seen in various disorders inducing anagen effluvium.[5] They appear clinically as cadaverized hairs, trichoscopically as “macrocomedo-like” structures within the follicular ostium. Histologically, they represent remnants of hair shafts in the infundibulum and ostium of anagen follicles. We believe that scalp metastases should be included among possible causes of scalp BDs.

Scalp localization is a harbinger in BC patients. Diagnosis is often challenging, and performing a biopsy is not always easy in these patients. The vascular pattern and BDs on trichoscopy may improve diagnostic accuracy and differentiate scalp metastases from other conditions, such as alopecia areata. Skin biopsy and full-body instrumental staging are mandatory to confirm the diagnosis and guide treatment.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Ubillos N, Vola M, Mazzei ME, Magliano J. Pigmented cutaneous metastasis of breast carcinoma mimicking a melanoma. Actas Dermosifiliogr 2016;107:699-701.
2. Costa RL, Costa-Filho RB, Rosa M, Czerniecki BJ. Occult breast carcinoma presenting as scalp metastasis. Case Rep Oncol 2017;10:992-7.
3. Chernoff KA, Marghoob AA, Lacouture ME, Deng L, Busam KJ, Myskowski PL, et al. Dermoscopic findings in cutaneous metastases. JAMA Dermatol 2014;150:429-33.
4. Rugo HS, Melin SA, Voigt J. Scalp cooling with adjuvant/neoadjuvant chemotherapy for breast cancer and the risk of scalp metastases: Systematic review and meta-analysis. Breast Cancer Res Treat 2017;163:199-205.
5. Kowalska-Olezińska E, Slowińska M, Rakowska A, Czurawa J, Sicinska J, Olszewska M, et al. ‘Black dots’ seen under trichoscopy are not specific for alopecia areata. Clin Exp Dermatol 2012;37:615-9.