Case Report

Leser-Trelat sign preceding male breast cancer

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ABSTRACT

Introduction: Leser-Trélat sign is a paraneoplastic marker characterized by the abrupt appearance of seborrhoeic keratoses. It is described in association with many underlying malignant diseases.

Case report: We report a case of coexistence of two rare entities, represented by the Leser-Trélat sign occurring with male breast cancer.

Discussion: The association of male breast cancer and LT sign is decidedly unusual. To our knowledge, our case report is the second to describe the association of these two rare entities.

Conclusion: A proper dermatological examination and a good knowledge of cutaneous paraneoplastic syndromes can be of great help in screening for multiple skin cancers.

1. Introduction

Male breast cancer is rare and poorly studied. It represents approximately 1% of all breast cancers worldwide and less than 1% of all male cancers [1]. Leser-Trélat sign (LT sign) is characterized by the appearance of multiple seborrhoeic keratoses in association with underlying malignant disease. The association of these two entities is extremely rare.

We report the case of a male with Leser-Trélat sign occurring with breast cancer, in order to highlight the clinical features of this paraneoplastic syndrome.

Our case report was reported in line with SCARE guideline [3].

2. Case report

A 74-year-old male without any personal or familial disease history was referred to our department for an ulcerated lesion of the left breast evolving 2 years ago. Interrogation revealed a story of a sudden and simultaneous eruption of multiple brown to black papules of the face and the back, occurring 3 years before the breast lesion.

Clinical examination found a rounded 5 cm ulceration with a fibrous indurated base and raised borders of the left breast with the destruction of the nipple (Fig. 1). Besides multiple brownish maculopapular lesions with a stuck-on appearance scattered around the face and the trunk (Fig. 2).

Dermoscopy of brown lesions showed a cerebriform pattern, pseudocysts, and pseudo-comedones corresponding to seborrhoeic keratoses (Fig. 3).

Lymph nodes palpation discovered painful axillary lymphadenopathy, adhering to both superficial and deep planes, measuring 5 × 4 cm.

A skin biopsy was performed, histological and immunohistochemical appearance was in favor of a cutaneous localization of an infiltrating carcinoma probably of mammary origin, with positive estrogenic receptors, positive HER2 receptors, and moderate membrane labeling of more than 10% of tumor cells (Fig. 4).

As part of the extension assessment, a cervico-thoraco-abdominopelvic scanner was performed, showing Left mammary tumor of the junction of the upper quadrants and retrormamellonary measuring 49 × 17 mm, extending over 38 mm, locally advanced with skin infiltration and invasion of the large pectoral muscle. Associated to pathologic lymphadenopathy of the left axillary lymph node, sub-pectoral and mediastinal lymph nodes, pulmonary parenchymal micronodules, and osteocondensing islets of the left ischium and the 3, 4, 7, and the 9th right ribs and the 2nd left rib.

The tumor was classified T4b N1 M1 and the patient was referred to an oncology center for chemotherapy.
Leser-Trélat sign is a paraneoplastic marker characterized by the abrupt appearance of seborrheic keratoses. It was first documented by Edmund Leser and Ulysse Trélat, but it was suggested that Leser and Trélat were observing angiomas and not seborrheic keratoses. A proper description of the Leser-Trélat sign was published by Hollander in 1900 [2].

Multiple growth factors are suggested to be responsible for the appearance and/or increase in the number and size of seborrheic keratoses, such as the Epidermal Growth Factor, Transforming Growth Factor-alpha, and amphiregulin [4]. An EGFR immunohistochemical analysis can be proposed in the context of the acute appearance of multiple seborrheic keratoses [5].

LT sign is described in association with many underlying malignant diseases, usually with adenocarcinoma. Most frequently it occurs with adenocarcinoma of the colon, stomach, and breast.

Contrary to women breast cancer, male breast cancer is very rare and insufficiently studied. Its management is modeled on post-menopausal female breast cancer protocol.

The association of male breast cancer and LT sign is decidedly unusual. Rajiv Garg et al. [6] reported a case of a 75-year-old male with a history of breast carcinoma, presenting Leser-Trélat sign leading to...
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4. Conclusion

Clinically diagnosed seborrheic keratoses are known as usual and harmless lesions. Yet, an acute appearance of these benign lesions is an alarming sign that indicates an underlying malignancy. We stress here the importance of a proper knowledge of paraneoplastic cutaneous signs that can help detect malignancies in early stages.

Ethical approval

Approval has been given.

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Author contribution

Aouali Soraya: Conceptualization, Investigation, Writing.
Sara Bensalem: Investigation.
Hasnae Saddouk: Investigation.
Asmae Aissaoui: Data curation.
Amal Bennani: Data curation.
Nada Zizi: Supervision, Conceptualization.
Siham Dikhaye: Conceptualization, Visualization, Review and editing, Supervision.

Registration of research studies

1. Name of the registry:
2. Unique Identifying number or registration ID:
3. Hyperlink to your specific registration (must be publicly accessible and will be checked):

Guarantor

Aouali Soraya.

Consent

Consent has been obtained.

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Declaration of competing interest

No conflicts of interest.

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

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Fig. 4. Histological image showing tumor cells bordered by retraction slits, with a reversed polarity, hyperchromatic nucleus and abundant eosinophilic cytoplasm.