



Metastatic eyelid disease associated with primary breast carcinoma: case report

Doença metastática palpebral associada a carcinoma primário de mama: relato de caso

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ABSTRACT

Metastasis confined to eyelids are rare, representing less than 1% of malignant eyelid lesions. More than 50% of all eyelid metastasis are reported to have the breast as the most common primary origin. Two cases of metastatic eyelid disease associated with primary breast carcinoma are described. These lesions were the first sign of metastatic systemic disease. Case 1: An 80-year old woman with no significant ophthalmological history complaining of a discrete painless lesion in the left upper eyelid. She had been diagnosed 10 years before as infiltrated ductal carcinoma of right mammary gland with no reference of metastatic disease. Case 2: A 77-year old woman who attends our ophthalmology service came complaining of a four-month history of a painless swelling and erythema of right lower eyelid. The past medical history was significant for infiltrated ductal carcinoma on right mammary gland 2 years before the ocular manifestation. Breast carcinoma is notorious for its presentation diversity. Metastatic disease should be considered as differential diagnosis of eyelid lesions. Although rare, these lesions can be an initial sign of systemic malignancy.

Keywords: Neoplasm metastasis; Eyelid neoplasms/secondary; Carcinoma; Breast neoplasms/pathology; Case reports [Publication type]

INTRODUCTION

Metastasis confined to eyelids are rare, representing less than 1% of malignant eyelid lesions⁽¹⁻²⁾. Twenty seven per cent of eyelid metastasis appear before primary lesions⁽¹⁾. More than 50% of all eyelid metastasis are reported to have the breast as the most common primary origin⁽³⁾.

Eyelid metastasis misdiagnosis is not uncommon. Clinically, these tumors can present as painless nodules, diffuse eyelid swelling, or ulcerative lesions of both upper and lower eyelids⁽¹⁾. Inflammatory nodule, similar to a chalazion, has also been reported⁽¹⁾. They may involve lid epidermal or conjunctival surfaces⁽⁴⁾.

These lesions are more frequent in patients between 50 and 80 years old⁽³⁾, and are 3 times more frequent in women than in men⁽⁵⁾.

The primary tumor is usually diagnosed before the ocular manifestation, and the average interval between primary diagnosis and metastatic lesion varies from 4.5 to 6.5 years, but it also can take more than 20 years after the primary tumor diagnose⁽⁶⁾.

These tumors must be removed surgically by excision. Histopathologic examination is an essential method for diagnosis confirmation⁽¹⁻³⁾.

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Two cases of metastatic eyelid disease associated with primary breast carcinoma are described. These lesions were the first signs of metastatic systemic disease.

CASE REPORT

Two cases of metastatic eyelid disease associated with primary breast carcinoma of Oculoplastic and Orbital Disorders Services of ABC School of Medicine are described. These two women cases were diagnosed before the ocular manifestation had been related.

Case 1

A 80-year old woman with no significant ophthalmological history came to our department complaining of a discrete painless lesion in the left upper eyelid.

She had been diagnosed 10 years before as infiltrated ductal carcinoma of right mammary gland with no reference of metastatic disease.

Clinical examination showed a solid nodule measuring 4 mm X 2,5 mm attached to left upper eyelid tarsal conjunctiva margin (Figure 1A and B). Nothing was observed in the right eye. The corrected visual acuity was 20/25 OD and 20/20 OS. The anterior segment examination was normal with normal IOP. The pupillary reflex was normal. No proptosis was observed and fundus examination was normal. No palpable lymph nodes were present.

After the lesion was surgically removed, the histopathologic exam of specimen showed rough conjunctival lesion, showing malignant neoplastic cells arranged in blocks surrounded by loose stroma, nuclear grade II, and abundant cytoplasm. The immunochemistry analysis confirmed metastatic breast carcinoma (Figure 2A and B).

In this case, the eyelid lesion was the first manifestation of metastatic disease. The patient was followed-up by a multidisciplinary medical group and did not show others signs of metastatic disease.

Case 2

A 77-year old woman who attends our ophthalmology service came complaining of a four-month history of a painless swelling and erythema of right lower eyelid. There is no significant ophthalmic history.

The past medical history was significant for infiltrated ductal carcinoma on right mammary gland. Radical mastectomy, radiotherapy and chemotherapy were performed 2 years before the ocular manifestation.

Clinical examination showed swelling and erythema of right lower eyelid with no extension to face (Figure 1C and D). The lesion measured 35 mm X 12 mm. Examination of the left eye was unremarkable. Corrected visual acuity was 20/40 OD and 20/30 OS. The cornea was clear, the anterior chamber was normal and senile cataract was present in both eyes. Intraocular pressure and fundus examination were normal in both eyes. There was no proptosis. The extra ocular move-

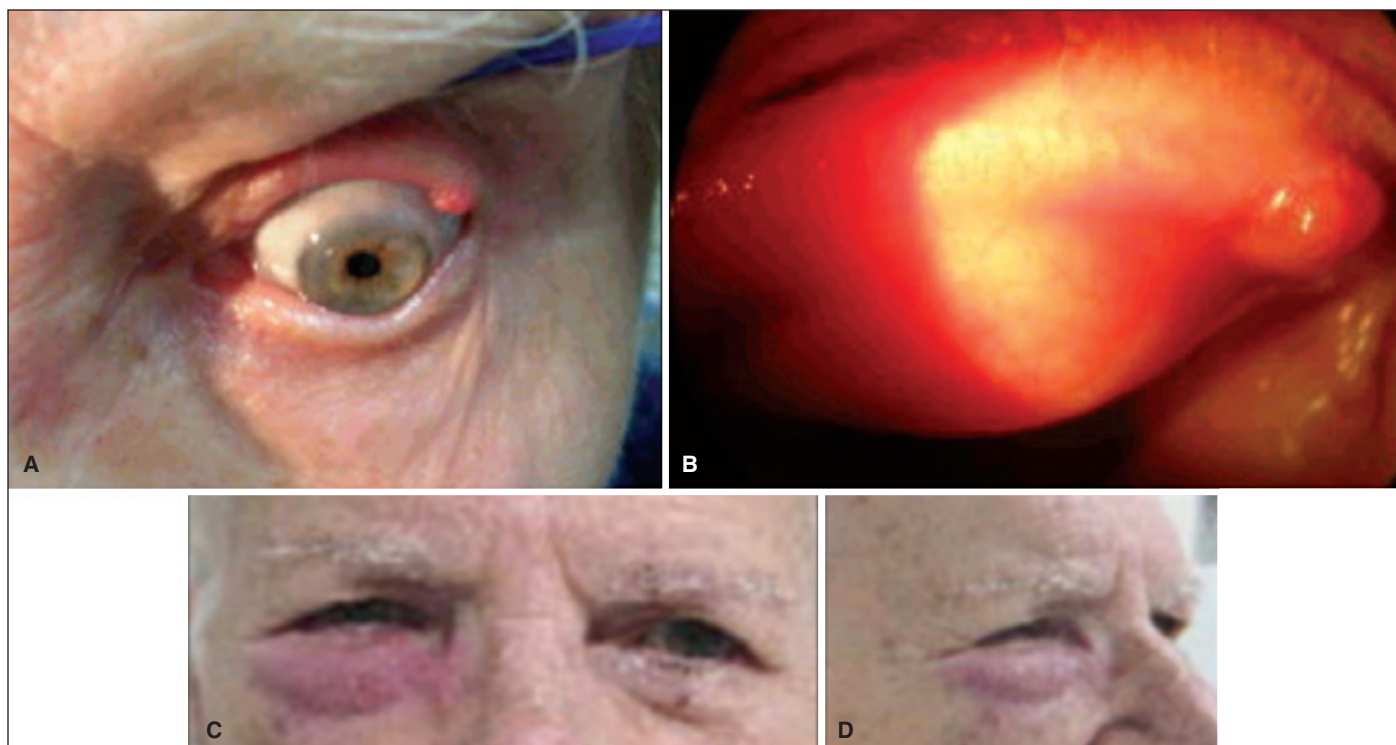


Figure 1 - Clinical findings. Case 1: A and B - One nodule of solid tissue attached to margin and tarsal conjunctiva of the left upper eyelid. Case 2: C and D - Swelling and erythema of lower right eyelid with no extension to face.



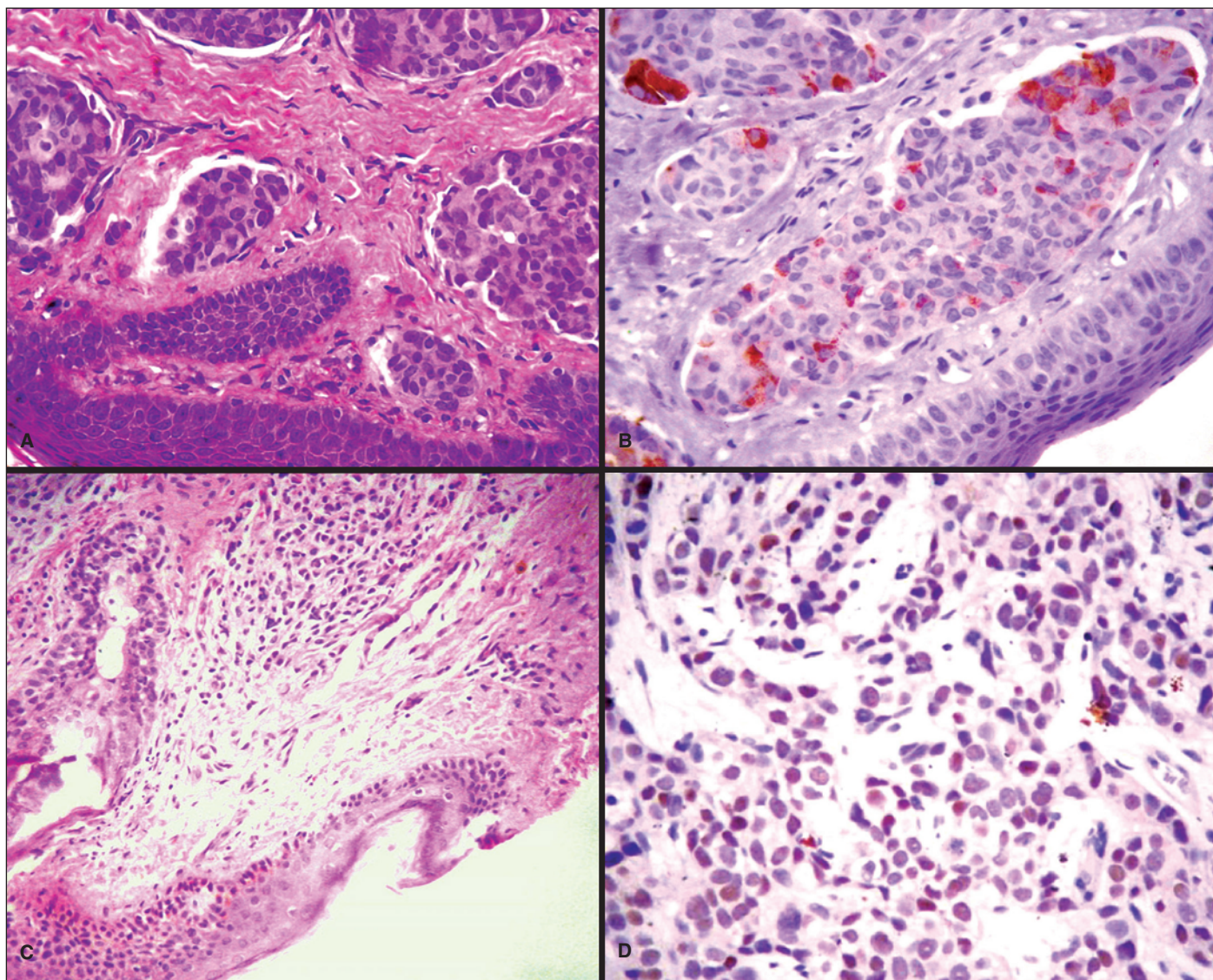


Figure 2 - Case 1: A - Rough conjunctival lesion, showing malignant neoplastic cells arranged in blocks surrounded by loose stroma, nuclear grade II, and abundant cytoplasm. B - Immuno-histochemistry using BRST-2 antibody (specific for breast carcinomas. Case 2: C - Conjunctiva neoplastic growth of no cohesive neoplastic cells, nuclear grade I, isolated or in blocks, sometimes arranged in Indian files. D - Immuno-histochemistry using estrogen receptor antibody was positive, showing the breast origin of the lesion.

ments were normal and the pupillary reflex was normal. No palpable lymph nodes were present.

An CT scan orbit showed an increased attenuation of soft tissues anterior to the orbital septum.

We performed an incisional biopsy of the lesion. The histopathologic examination of the specimen demonstrated conjunctival growth of non-cohesive neoplastic cells, nuclear grade I, isolated or in blocks, sometimes arranged in Indian files. The immunochemistry analysis confirmed the diagnosis of metastatic breast carcinoma. (Figure 2C and D).

The eyelid lesion was the first sign of metastatic disease. The patient is keeping her follow-up with a multidisciplinary medical group with no other signs of metastatic diseases.

COMMENTS

Breast carcinoma is notorious for its presentation diversity. Bone and brain metastasis are common and it is rare to find eyelids metastasis^(3,5,7). Aurora and Blodi reviewed 892 eyelid biopsies, which showed an incidence of 0.3%⁽⁸⁾. Wang et al. reported 1 metastasis cancer (0.8%) in their review of 127 histologically confirmed eyelid cancers⁽⁷⁾.

Metastatic disease should be considered as differential diagnosis of eyelid lesions⁽⁹⁾. Mansour and Hidayat examined 31 patients with eyelid metastatic disease and reported that metastasis was suspected in only 32% of the cases⁽³⁾. Eyelid lesions can be an initial sign of systemic malignancy, although this is rare⁽¹⁰⁾. A handful of reports named cases with pul-

monary and gastrointestinal carcinoma. A few cases have also included breast carcinoma and malignant lymphoma^(1,10).

Morgan et al. reported that breast metastasis commonly present as painless induration, whereas lung metastasis present as solitary nodular lesions⁽¹⁰⁾. In literature, some authors reported an unusual presentation of breast metastatic carcinoma as eyelid swelling⁽⁶⁾. It is reported here two cases of metastatic eyelid disease associated with primary breast carcinoma presenting as the first sign of systemic metastatic disease. In this study, breast metastasis presenting as eyelid solitary nodular lesion (case 1) and as eyelid painless swelling and erythema is reported (case 2).

The least interval for metastasis appearance was 4 years (ranging from 2 months to 15 years), and the minimum survival after presentation with eyelid metastasis was 9.7 months (ranging from 6 weeks to 4 years)⁽¹⁾. A case of eyelid metastasis 10 years after the primary diagnosis of breast cancer and another 2 years after are reported. These patients have a three-year follow-up with a multidisciplinary medical group.

RESUMO

Metástase confinada às pálpebras é rara, representando menos de 1% das lesões malignas palpebrais. Mais de 50% das metástases palpebrais são relatadas como tendo a mama como sítio primário. Relatamos dois casos de doença metastática palpebral associada a carcinoma primário de mama. Estas lesões foram o primeiro sinal de doença metastática sistêmica. Caso 1: Paciente do sexo feminino, 80 anos de idade sem antecedentes oftalmológicos apresentando discreta lesão nodular indolor na pálpebra superior do olho esquerdo. O carcinoma ductal de mama foi diagnosticado há 10 anos sem doença metastática. Caso 2: Paciente do sexo feminino,

77 anos de idade, com queixa de edema indolor e hiperemia na pálpebra inferior do olho direito há quatro meses. Apresentava antecedente pessoal de carcinoma ductal infiltrativo de mama diagnosticado há dois anos, sem doença metastática. O carcinoma de mama é notório por sua diversidade na apresentação clínica. A doença metastática deve ser considerada no diagnóstico diferencial das lesões palpebrais. Embora raras estas lesões podem ser o primeiro sinal da doença sistêmica.

Descritores: Metástase neoplásica; Neoplasias palpebrais/secundário; Carcinoma; Neoplasias da mama/patologia; Relatos de casos [Tipo de publicação]

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