

Isolated Intraorbital Metastasis in Breast Carcinoma

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Abstract

We report a case of metastases to the eye, in a 30 year old lady with carcinoma breast leading to isolated metastatic involvement of the lateral rectus muscle with no evidence of metastases at any other site in the body after a follow up of one year after completion of chemotherapy. ©

INTRODUCTION

A 30 year old lady developed isolated intraorbital metastases, 15 months from the diagnosis of carcinoma breast. We report this case with relevant and short review of literature.

CASE REPORT

A 30 year old lady with no known significant comorbidities was diagnosed as a case of carcinoma right breast in Jan. 2003. She underwent right modified radical mastectomy (MRM) and on histopathological examination (HPE) was reported as infiltrating ductal carcinoma (IDC), grade II, 1/11 Lymphnode nodes positive from right axilla and she was staged as Stage II, T2N1M0, carcinoma right breast, ER/PR Positive. Following right MRM she received six cycles of (three weekly) adjuvant chemotherapy with FEC (5FU, Epirubicin, Cyclophosphamide) based protocol till June 2003. After completion of chemotherapy she was on regular follow-up. She reported after fifteen months of the initial diagnosis to an ophthalmologist with complaints of protrusion of right eyeball and swelling around the right eye. On examination her visual acuity with glasses was 6/6 in both the eyes. External examination revealed right proptosis with minimal periorbital swelling. Orbital examination did not reveal any palpable mass and there was no increased resistance to retropulsion. Mild conjunctival congestion was noted in the temporal bulbar conjunctiva. Ocular movement appeared full in both the eyes. Intraocular (IO) pressure by applanation tonometry was 10 mm Hg in both the eyes. Fundus examination by indirect ophthalmoscopy revealed a normal disc, posterior pole and retinal

periphery in both the eyes. Ultrasound examination of the right orbit revealed a mass involving the belly of the right lateral rectus muscles of homogenous nature and two spots of high reflectivity within it. Bilateral lacrimal glands appeared enlarged. Magnetic resonance imaging (MRI) orbits revealed right lateral muscle involvement with 2.7x1.6x0.9 cm mass along with it and the remaining muscles were normal (Fig. 1). Left orbit and orbital contents were unremarkable. CT chest, abdomen, MR brain, Whole body bone scan (Technetium 99 labelled), as a part of metastatic workup were normal. She underwent right lateral orbitotomy and histopathological examination (HPE) of the orbitotomy specimen was reported as metastatic deposit from breast carcinoma in orbital tissue which stained positive on

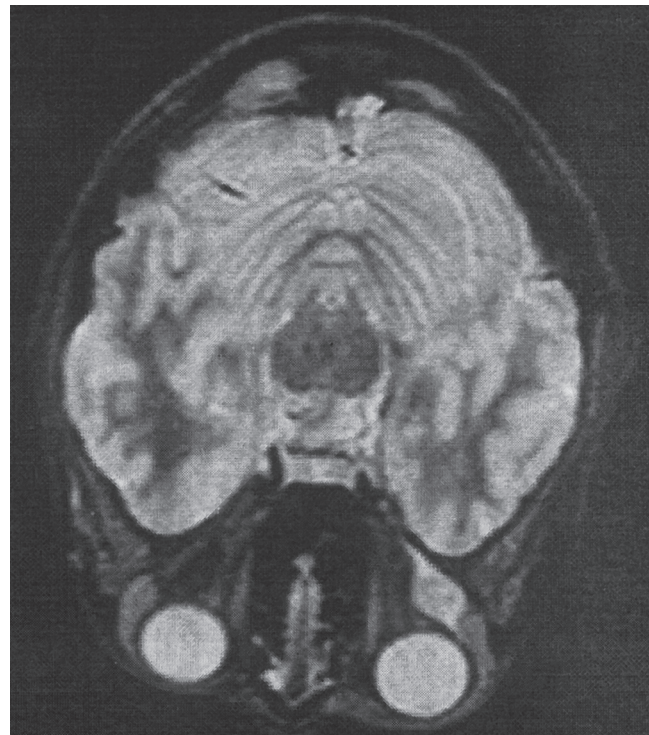


Fig. 1 : Axial T2W MR image showing a hyperintense lesion in the lateral rectus muscle of the right orbit.

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ER/PR. She received radiotherapy to the lesion after surgery. There is no evidence of local recurrence in the eye. Subsequently she is on antiestrogen (Tamoxifen). At present she is on regular follow-up.

DISCUSSION

Orbital metastasis occurs in various cancers. Metastatic disease accounts for 2.5-13% of all the orbital tumours.¹ Breast carcinoma is the most common primary source of orbital metastasis, accounting for 29 to 51% of metastasis. Other tumours metastasizing to eye are lung, thyroid, cutaneous melanoma, uterus and tonsil.²

Eye metastases due to breast carcinoma are usually multiple and bilateral as compared to other primary sites leading to eye metastasis.² Adenocarcinomas account for majority of the eye metastasis and squamous cell carcinomas in the eye metastasis signifies extension of malignancy from adjacent structures.² Other histopathological subtypes observed in eye metastasis are melanoma, oat cell carcinoma, carcinoid tumour, poorly or undifferentiated carcinoma.²

Although, initial presentation of orbital metastasis may

resemble or mimic to be of infiltrative or inflammatory pathology, possibility of orbital metastases, should be considered.¹ A thorough metastatic workup is essential. Also, most patients with eye metastasis usually have concomitant non-orbital metastases.^{1,2} This case is unique in being the isolated metastatic involvement of right lateral rectus muscle in carcinoma breast with no evidence of metastatic involvement at any other site in the body. This case also, highlights the importance of an awareness of orbital metastasis in patients with a previous history of carcinoma breast.

REFERENCES

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Announcement

Nominations for Orations/Awards for XVIII Annual CME of API-Delhi State Chapter

The XVIII annual CME of API-Delhi State Chapter will be held on 3rd and 4th Nov. 2007 at Hotel Ashok, New Delhi.

Nominations are invited for the following: Orations/Awards

1. Prof. Hari Vaishnawa Oration
 2. Dr. R.N. Chugh Oration
 3. Prof. B.C. Bansal - Mrs. Uma Bansal Oration
 4. Dr. K.L. Wig Oration
 5. Smt. Pawan Kumari Jain Awards
 6. Smt. Meena Dhamija Awards - Presentation of original research work by young investigator.
- } eligible for all members
} of JAPI
} eligible for members of API-Delhi
} State Chapter

The orator should be a well-recognized personality in the field of medicine with considerable clinical/research experience and should have contributed to the activities of either the parent API or any of its branches.

Nominations should be submitted (alongwith a bio-data duly proposed and seconded by members of API) by **31st July 2007** to:

For further details contact : Dr. AP Misra, Hony. Gen. Secretary, API-Delhi State Chapter, B-2/32, Azad Apartments, Aurabinod Marg, New Delhi - 1100 16.

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