Bilateral optic disk metastasis from breast carcinoma

Pukhraj Rishi, Abhishek Dixit, Aditya Verma

Key words: Breast carcinoma, eye, metastasis, optic disk, optic nerve, tumor

Ocular metastases from breast carcinoma are rare. The reported incidence of ocular metastasis varies from 0.07% to 12%; most frequently to the uveal tract.[1] Metastases limited to optic nerve occur far less frequently; more so bilaterally. We describe a case of bilateral optic disk metastasis secondary to breast carcinoma causing complete visual loss.

Case Report

A 46-year-old lady presented with decreased vision in both eyes since 3 months. She was diagnosed of the infiltrative ductal type of breast adenocarcinoma and had a right mastectomy and 6 cycles of chemotherapy 5 years back. She was in remission for 4 years till she had lymph node and bone metastasis, 13 months back. She was retreated with 12 cycles of radiotherapy and 6 cycles of chemotherapy. Ocular examination revealed nil light perception in both eyes. Anterior segment examination revealed sluggish pupillary reaction to light in both eyes. Dilated fundus examination revealed infiltrative mass over the optic disk with intrinsic calcification and sub-retinal fluid in both eyes [Figs. 1-3a and b]. Optical coherence tomography [Fig. 3c and d] and ultrasound [Fig. 4] revealed high reflectivity and posterior shadowing. Visual evoked potential (VEP) revealed extinguished response, bilaterally [Fig. 5].

Discussion

Review of the literature reveals low rates of isolated metastases to the optic nerve (1.3–4%).[2-4] The interval between initial diagnoses of breast carcinoma to the detection of uveal metastasis is longer (range: 8–240 months) than from lung carcinoma (range: 2–15 months).[5] Our patient was diagnosed of metastasis nearly 60 months after detection of breast carcinoma...
carcinoma. VEP revealed extinguished response, bilaterally. The patient was advised palliative therapy. In conclusion, impairment of vision in a patient with known breast carcinoma could be an alarming symptom of ocular metastasis.

Figure 4: Ultrasound reveals sub-retinal fluid (left) and shadowing (right) from the mass lesion over the disk

References


Source of Support: Nil. Conflict of Interest: None declared.