THE MRI FINDINGS OF IRIS METASTASIS IN PATIENTS WITH BREAST CANCER

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1. INTRODUCTION
The most common malignancy of eye is intraocular metastasis and iris is relatively rare as a first metastatic site (1). It was reported that breast cancer (1), prostate cancer (2), adenoid cystic carcinoma of parotid gland (3), lung cancer (4), merkel cell carcinoma (5), esophageal adenocarcinoma (6), gastric cancer (7), endometrial cancer (8), Ewing sarcoma (9) and cervical cancer (10) metastasized to iris.

The most common cancer type are the breast cancer in women. Breast cancer generally metastasizes to bone, lung, liver and brain. Breast cancer and lung cancer are the most common tumors that metastasize to iris (11). The metastasis of iris was generally diagnosed on ophthalmologic examination. In this case, we reported MRI findings of metastasis of iris in patients with breast cancer.

2. CASE REPORT
We report a case of a 51-year-old. She was diagnosed breast cancer two years ago. After adjuvant chemotherapy, radiotherapy and trastuzumab, she was admitted to hospital with the complaints of headache on February 2012. The magnetic resonance imaging (MRI) revealed multiple brain metastasis. Whole brain radiotherapy and palliative chemotherapy were applied to the patients. In follow-up, on ophthalmological examination, there was a solid lesion on iris. The orbital MRI was performed and it revealed the thickness on iris of left eye. After diagnostic procedure final pathological review reported that invasive ductal carcinoma metastasis. Iris metastasis may be considered by MRI findings following: The thickness on iris and contrast enhanced lesion. This reason may be resulted that the fine needle aspiration biopsy for diagnosis of iris metastasis is not need.

Keywords: Iris, metastasis, breast cancer, magnetic resonance

Figure 1. Precontrast imaging
A German study was reported that the prevalence of intraocular metastasis in metastatic breast cancer was 4.6% (12). It is most commonly located in the choroid. But the rate of intraocular metastasis was higher (10.8%) in patients with more than one organ (especially presence of lung and brain metastasis). It was reported that breast cancer with iris metastases has poor prognosis (1).

Iris metastasis of breast cancer was generally diagnosed by fine needle aspiration biopsy. In our case iris metastasis was strongly considered by ophthalmological examination and orbital MRI findings. Both of ophthalmological examination and orbital MRI findings may be enough for diagnosis of iris metastasis. This reason may be resulted that the fine needle aspiration biopsy for diagnosis of iris metastasis is not need. Iris metastasis may be considered by MRI findings following: The thickness on iris and contrast enhanced lesion.

In addition, it was seen bilateral ethmoidal metastasis on MRI. Considering both of iris and ethmoidal metastasis, these metastases of breast cancer may be accepted as a manifestation of aggressive clinical course and poor prognosis.

3. DISCUSSION

We reported that the patient with breast cancer metastasized to iris ant its MRI findings. The patients had HER 2 Like breast cancer. Although tumors with HER2 Like have worse prognosis and have high metastatic activity, HER2 targeted therapies have changed the outcome. Despite of optimally surgery and optimally adjuvant therapy aggressive therapy, recurrence was occur within two years.

REFERENCES


