



FOLLICULAR THYROID CARCINOMA PRESENTING WITH OCCIPITAL BONE AND LUNG METASTASIS



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BACKGROUND

➤ When follicular thyroid carcinoma (FTC) is diagnosed, extrathyroidal invasion, lymphatic and distant metastasis have been determined in 25%, 5-10% and 10-20% of the patients respectively.

➤ The most common site of distant metastases of FTC is the lung, followed by the bone.

➤ The incidence of skull metastasis of FTC is about 2.5 to 5.8%. Skull metastasis of FTC is located in the skull base and occipital area.

CASE

➤ 60-years-old man was operated for total thyroidectomy in 1998 and histopathology of the surgical specimen was reported as follicular carcinoma of thyroid with features of vascular invasion.

➤ 150 mCi of radioactive iodine (RAI) treatment was given after the surgery. Post RAI I-131 whole-body scanning (I-131-WBS) was normal. When the patient admitted to our center in 2006, I-131-WBS was performed and revealed occipital bone and lung metastasis.

➤ The patient was operated and occipital bone removed. Histopathology of the surgical specimen was reported as FTC metastasis.

➤ After then 200 mCi additional radioiodine dose was given. In 2008, 250 mCi additional radioiodine dose was given for recurrence. I-131-WBS revealed occipital bone and multiple defined mass, which were metastasis in both lungs in September 2012. Also cranial magnetic resonance imaging (MRI) revealed 24x24x22 mm mass in occipital zone.

➤ He underwent F-18-FDG PET/CT scan for investigating distant metastasis. On PET scan, an increased of F-18-FDG (SUVmax: 24.1) uptake was seen in 23 mm mass which had destructed occipital bone.

➤ Also, increased FDG uptake (SUVmax: 10.8) in 26 mm mass on the upper lobe of the right lung and in 34 mm mass on the middle lobe medial of the right lung (SUVmax: 2.4) was determined. There were multiple parenchymal lesions, which were in different diameters and in different metabolic activities in both lungs. The patient was given 275 mCi additional radioiodine therapy.

Picture 1. Torax CT of the patient



Picture 2. Brain CT of the patient



CONCLUSION

➤ This is a rare case of follicular thyroid carcinoma metastasis to occipital bone. The treatment choice of FTC is total thyroidectomy with radioiodine administration, and surgical procedure for metastatic lesions and TSH suppressive therapy