A Case of Bilateral Middle Ear Squamous Cell Carcinoma Treated with the Cyberknife

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Patients with carcinoma of the middle ear usually have a poor prognosis even after multidisciplinary treatment. We describe the rare case of a patient with bilateral middle ear carcinoma who was treated by stereotactic radiosurgery using the Cyberknife, and remained tumor free for more than five years after the therapy.

The patient was sorely afflicted with persistent left otorrhea despite having undergone surgery for bilateral chronic otitis media and was diagnosed (confirmed by histopathological examination) as having carcinoma of the middle ear on the left side. FDG-PET imaging revealed accumulation in the right side ear also, however, the diagnosis of right middle ear carcinoma was finally made after five months by histopathological examination.

He underwent stereotactic radiosurgery using the Cyberknife on two occasions, had no remarkable complications, and survived without tumor recurrence for more than five years. We suggest that stereotactic radiosurgery using the Cyberknife may be useful for the treatment of middle ear carcinoma, especially bilateral middle ear carcinoma, because of the reservation around the restriction by the surrounding organs.

Keywords: bilateral, Cyberknife, middle ear carcinoma, chronic otitis media

References

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The local findings of the bilateral ears, and pathological findings from left middle ear.
Swelling is seen in the right ear drum, as well as in the left ear drum where granulation was also observed.
The pathological findings are shown from left middle ear revealing squamous cell carcinoma.

The local findings of the bilateral ears after more than 5 years following Cyberknife treatment.
Both the ear drums were dry with good epithelization. There were no findings of recurrence.