

Cancer of the Temporal Bone

Malignancies of the temporal bone are uncommon. Most patients usually present with advanced disease due to a substantial delay in seeking treatment. Squamous Cell Cancer (SCC) is often mistaken for otitis media or chronic otitis media, which is commonly attributed to infections of the external canal.

Squamous Cell Cancer of the Temporal Bone (SCCTB) is uncommon and presents late. This often presents a dilemma to the treating physician as to the course of treatment modality to select that will bring about the best possible results. The available literature is often biased. For example, T1 disease of the SCCTB can be treated with radiation or surgery. Only after careful evaluation and assessing all the patient's factors can the treating physician make an appropriate decision on the way forward. This is relevant only in the situation of SCC. Other histopathologies in the form of basal cell carcinoma, adenoid cystic, and adenocarcinomas can present, and these do not respond to radiation therapy. Therefore, the only treatment that can be offered is resection.¹

All the available literature clearly shows that when resected with negative margins, overall survivorship is better than in cases where margins are positive.

Treatment of malignancies of the temporal bone are guided by (1) Biology of the disease, (2) Stage of the disease and (3) Patient comorbidities.

Nodal metastasis and distant metastasis also play a role in resectability and overall survivorship.

Neoadjuvant therapy consisting of chemotherapy in combination with radiation has shown promise. However, since the number of patients treated is too few, it is difficult to arrive at a proven statistical conclusion.

As with all such problems a large data collection with standardized protocols and reporting we might get clarity on how SCCTB or malignancies of the temporal bone might be better treated in the future.

Reference

1. Sioufi K, Haynes AD, Gidley PW, et al. Survival outcomes of temporal bone Squamous cell carcinoma: A systematic review and meta-analysis. *Otolaryngol Head Neck Surg.* 2024;171(1):1–10. DOI: 10.1002/ohn.678

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