

Universiti Kebangsaan Malaysia Medical Centre experience in managing temporal bone carcinoma: What can we learn?

Khairil Afif Mahmud, MBChB¹, Noor Dina Hashim, MS (ORL-HNS)¹, Fuad Ismail, FFRRCS, FRC², Mohd Razif Mohammad Yunus, MS (ORL-HNS)¹, Asma Abdullah MS (ORL-HNS)¹

¹Department of Otorhinolaryngology, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia,

²Department of Oncology and Radiotherapy, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia

ABSTRACT

Introduction: Temporal bone carcinoma is a rare and aggressive malignancy in the head and neck region. Although surgery carries an excellent cure rate if performed in the early stage, patients typically presented late. This study evaluates the clinical presentation and treatment outcome in a university hospital over the last ten years. **Methods:** Medical records of patients with temporal bone carcinoma presented to Universiti Kebangsaan Malaysia Medical Centre from 2010 until 2020 were retrieved. Data on clinical presentation, disease staging, and treatment outcome were collected and analysed using Microsoft Excel. **Results:** 15 patients were identified. The majority are Malay (53.3%) and female (66.7%). The mean age is 64 years old, with a range between 43 to 97 years old. Otorrhea (79%) and otalgia (71%) are the most frequent complaints. 43% of patients presented late to otorhinolaryngology, more than six months of symptoms. There were 12 cases of squamous cell carcinoma, two cases of recurrent squamous cell carcinoma, and one case of metastatic adenocarcinoma. Most patients (80%) had a high stage (T3 and T4) disease at initial diagnosis. 53% of patients underwent surgery, whereas 33 % received radiotherapy or chemotherapy only. Nine patients (64%) have passed away with an average survival period of nine months. **Conclusion:** In our series, patient with temporal bone carcinoma presented late with advanced stage. Management strategies can be complex, thus requiring a well-organised multidisciplinary team to optimise treatment outcome.

Reliability of the 'M-Line' in the prediction of the facial nerve position in patients with parotid neoplasms

Cheah Pei Fen, MBBS¹, Punithamalar Krishnan, MBBS¹, Lawrence Kong Sing Siong, MBBS², Goh Liang Chye, MS (ORL-HNS)¹, Yeoh Aik Guan, FRCR(UK)³, Mohd Razif Mohamad Yunus, MS (ORL-HNS)⁴

¹Department of Otorhinolaryngology, Hospital Sultanah Aminah, Johor Bahru, Johor, Malaysia, ²Department of Otorhinolaryngology, Hospital Bintulu, Bintulu, Sarawak, Malaysia, ³Department of Radiology, Hospital Sultanah Aminah, Johor Bahru, Johor, Malaysia, ⁴Department of Otorhinolaryngology, Hospital Canselor Tuanku Muhriz UKM, Kuala Lumpur, Malaysia

ABSTRACT

Introduction: Preoperative radiological assessment of parotid tumours represents a crucial step in the planning of a parotidectomy in order to avoid post-operative facial nerve paralysis. The purpose of this study is to determine the reliability of the 'M-line' in predicting the facial nerve position and compare it to various radiological methods in the same context. **Methods:** 66 patients with whom had underwent parotidectomy for parotid tumours from January 2012 to February 2021 were analyzed. Parotid tumour location was identified using the retromandibular vein, facial nerve line, Conn's arc, Utrecht line and the 'M'-line were compared to the intraoperative location of parotid tumours. The 'M'-line is a novel hypothetical line (drawn between the medial surface of the mandible to the lateral border of the mastoid process) used to identify the location of the facial nerve radiologically. **Results:** The 'M-Line' and other methods of radiological assessments were associated with a statistical significance in predicting if the parotid tumours were superficial or deep to the facial nerve (p-value <0.05). The 'M-line' had demonstrated a sensitivity of 73.6% and 92.3% specificity. It had also yielded the highest accuracy (77.3%) in the prediction of the parotid tumour location in relation to the facial nerve. **Conclusion:** While the radiological lines represented by the Retromandibular vein, facial nerve line, Utrecht line and Conn's arc were statistically significant in predicting the location of the parotid tumour in relation to the facial nerve, the M-line was the most accurate and sensitive predictor in our study. The M-Line can be a potentially useful tool to predict the location of the facial nerve in relation to a parotid tumour.