



Outcome of compartment resection locally advanced oral carcinoma extending to infratemporal fossa and correlation with epigenetic factors



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Abstract

Oral cancer has high prevalence in India and is the most common malignancy in our region. 80% of patients present in locally advanced stage. Till the last decade extension into infratemporal fossa (T4b) was considered inoperable and treated with palliative intent. Since 2007, few institutions have treated these cancers by compartment resection of infratemporal fossa with curative intent. We also found overexpression of a nucleolar protein – Nucleoplasmin 1 in these patients. The levels of Nucleoplasmin 1 showed positive correlation with stage and grade of disease. We treated 60 patients with oral cancer extending to infratemporal fossa by compartment resection of infratemporal fossa along with composite resection of the oral cancer and modified radical neck dissection from January 2015 to December 2018. 50 patients underwent reconstruction with pectoralis major myo-cutaneous flap, four with microvascular free tissue transfer and six with forehead flap. Among these patients 25 received Neoadjuvant Chemotherapy. After a mean follow up of two years, 36 patients are alive and disease free. Patients with involvement of posterior half of medial pterygoid or pterygoid plates recurred within six months. Close margins of resection were noted in 15 of the patients who had undergone Neoadjuvant Chemotherapy. All patients in our series underwent post-operative radiotherapy and the patients with close margins or extra nodal spread from lymph node received to post-operative chemotherapy with radiotherapy. 18 patients had local recurrence in infratemporal fossa within a period of one year. Neoadjuvant chemotherapy reduced the bulk of disease but did not benefit disease free survival. Two patients had regional recurrence in cervical lymph nodes. Conclusion: compartment resection of infratemporal fossa provides good loco-regional control in selected cases with locally advanced oral cancers (T4b). Nucleoplasmin 1 expression has positive correlation with stage of the disease. Neoadjuvant chemotherapy offers no advantage in the outcome.

Biography

S M Azeem Mohiyuddin completed his graduation in medicine (MBBS) in Bangalore, India in 1991 and post-graduation (MS) in Otorhinolaryngology from Command Hospital Air Force, Bangalore in 1995. He did fellowship in Head and Neck Oncosurgery at Tata Memorial hospital, Mumbai, India from Sept 1997 to March 1999. He is a Fellow of International College of Surgeons and American College of Surgeons. He is a Professor and Heads the Department of Otorhinolaryngology and Head and Neck surgery at Sri Devaraj Urs Academy of Higher Education and Research, Kolar, India. He is a member of National Academy of medical sciences, India. He has 62 indexed publications with 273 citations. His H-index is 6. He is pursuing Ph.D. in epigenetics in Oral Cancer. He is Faculty at various ENT and Head and Neck conferences and workshops in his country.



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