

Case Report

AN ENHANCED ROLE OF PALLIATIVE CARE IN THE MULTIDISCIPLINARY APPROACH TO LOCALLY ADVANCE EXTERNAL AUDITORY CANAL CARCINOMA PATIENT

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ABSTRACT

Squamous cell carcinoma of the temporal bone and external auditory canal is a rare tumor, with a reported incidence of 1 per million people. [Madsen *et al.*, 2008; Ragi *et al.*] Since it is a rare malignancy and is generally presented at advance stage, adequate treatment and control has been difficult. In this case report, we present a case of squamous cell carcinoma of the external auditory canal in 56-year-old male, who presented complaints of pain and sero-sanguineous discharge from right ear since a year and an ulcer proliferative growth involving right external auditory canal and mastoid for 6 months. Based on the initial diagnosis and presence of locally advance state of disease with intracranial extension, the tumour was deemed unrespectable and was referred to Department of Radiation Oncology. The case is of prime interest and is live example of contribution of customized palliative and supportive care management to improve the quality of life and regress the burden of disease.

Keywords: External Auditory Canal, Palliative Radiotherapy, Quality of Life.

INTRODUCTION

Carcinoma arising in the external auditory canal and temporal canal is rare and comprises <0.2% of head and neck neoplasm's. About 85% of the tumors involving the auditory canal, middle ear, and mastoid are squamous cell carcinomas. Infrequently, basal cell carcinomas, adenocarcinomas, adenoid cystic carcinomas, and melanomas are seen. [Lederman and Malignant, 1965] Chronic otorrhea and inflammatory or cholesteatoma within the external auditory canal and middle ear are associated risk factors. In locally advance case of squamous cell carcinoma external auditory canal, palliative therapy plays an important role in reducing disease burden, improving the quality of life and survival of the patient.

CASE REPORT

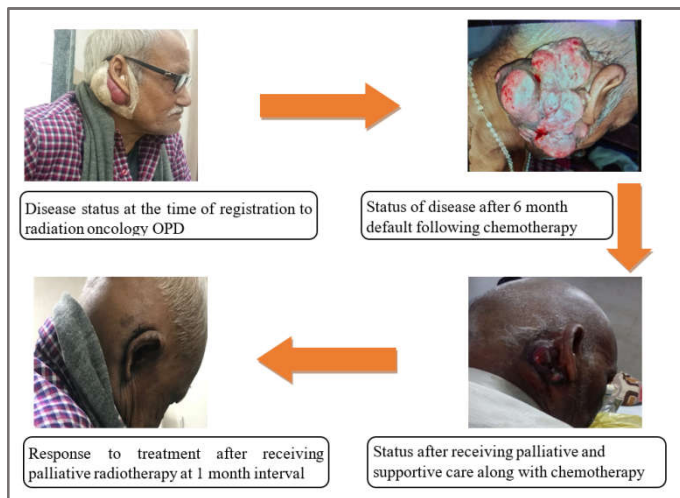
A 56-year-old male was registered with the radiation oncology OPD with complaints of pain and sero-sanguineous discharge from right ear since a year and an ulcer proliferative growth involving right external auditory canal and mastoid for 6 months. In January 2019, the patient initially consulted otorhinolaryngology department with complaints of pain and discharge from right ear. He was examined and diagnosed as a case of chronic suppurative otitis media. He underwent modified radical mastoidectomy, with polypectomy in February 2019 and the post-operative histopathology was found to be of squamous cell carcinoma. The ENT department referred the case to Department of Radiation Oncology for further evaluation and management, but the patient defaulted the process and remained out of picture for a year. In January 2020, the patient registered himself in the Radiation Oncology OPD with complain of severe pain. His otoscopic examination of the right ear showed that the external auditory canal was oedematous with sero-sanguineous discharge

and bulging of the tympanic membrane along with an ulcero-proliferative growth was present in the right external ear and mastoid. A Contrast - Enhanced Computed Tomography (CECT) head and neck was performed, suggesting 6.6*5.8*7 cm heterogeneously enhancing soft tissue lesion over right posterior auricular region and adjacent temporal bone. The imaging modality also presented osseous destruction of petrous, mastoid and styloid part of temporal bone, infiltrating trapezius and sternocleidomastoid muscle and intracranial extension to posterior cranial fossa. In view of locally advance disease (T4N0M0) and poor general condition of health, **the case was planned for palliative therapy.** Due to advance stage of disease and severe pain, the patient was found to be anxious and depressed. The reduced social life and lack of self-confidence to fight the disease has compelled the patient to undergo an emotional rollercoaster. The patient and his family members were properly counselled regarding the physical, emotional, social, and spiritual issues, a cancer patients face during the cancer experience. Pain management, was done according to the WHO step ladder pattern from NSAIDs to strong opioids. Though the total healing of the wound was not possible in the patient, proper management of wound symptoms - managing the bleeding, mal-odour, exudates, and progression of wounds, and preventing future wounds was critical to provide quality wound care. After observing a positive improvement in wound and overall health, palliative chemotherapy was started. After receiving 1 cycle of systemic chemotherapy along with supportive care, patient has 25% subjective as well as objective response. The patient was advised for further cycles of palliative radiotherapy, but Patient defaulted for six months and presented again with progression of disease, severe pain and bleeding from lesion. Patient underwent surgical debridement in coordination with department of general surgery and was provided with wound care management. The Patient was again advised for palliative radiation but due to his unwillingness for the same, the case was planned for systemic chemotherapy with paclitaxel and cisplatin. After receiving 2 cycles, the patient has almost 75% subjective response. Then patient and family were counselled again for palliative radiotherapy showing them a ray of hope for new life. Upon Patient's consent, the case was

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planned for 30 Gy /10 # palliative radiotherapy by 3DCRT and was completed in October 2020. Patient came for 1st follow up after one month and was found to have > 90% subjective and objective response.



DISCUSSION

Squamous cell carcinoma of the temporal bone and external auditory canal is a rare tumour with a reported incidence of between 1 to 6 cases per million populations per year [National Cancer Institute]. Tumors of the external ear occur mostly in patients between 60 to 70 years of age, tumors of the middle ear and the mastoid are mainly common in patients of 40 to 60 years of age. [Ahmad and Das Gupta, 2001; Byers *et al.*, 1983] In terms of sex, women are reported to be more susceptible to middle ear tumors, however the trend reverses in case of tumors of external ear. [Iversen *et al.*, 1999; Lewis, 1977] In general, tobacco and alcohol use are the two most important risk factor associated with squamous cell cancers of the head and neck. Squamous cell carcinoma of the temporal bone and external auditory canal is often associated with chronic otitis media and exposure to radiation therapy. The diagnosis of squamous cell carcinoma of the temporal bone and external auditory canal is based on histological examination of tissue of the tumour from the ear. The treatment of squamous cell cancer of the external auditory canal depends on the staging of the tumour which includes lymph nodes metastasis and facial nerve involvement. The preferred treatment often consists of a combination of en bloc surgical resection of the primary tumour with tumour-free surgical margins and postoperative chemotherapy and radiotherapy. The surgery that is often performed is the lateral temporal bone resection (LTBR) or a subtotal temporal bone resection (STBR) [Bridges and Doval, 2009]. Poor prognostic factors include the extent of the disease at presentation, positive margin, Dural and cranial nerve involvement, and facial nerve paralysis. The case was presented with locally advance cancer stage with intracranial extension where complete surgical resection and definitive radiotherapy could not be given. In view of that palliative therapy was planned and it was found that if best palliative and supportive care are provided along with cancer related treatment, it improves the quality of life of the patient along with reducing the burden of disease and improves survival.

Conclusion

The aim of palliative care is to improve the quality of life for patients (and their families) facing a serious illness like advance cancer stage. It can begin as early as initial diagnosis and continue through to end-of-life care and bereavement. For locally advance external auditory canal cancer patients, palliative care is often underused. It is highly important for patients and families to be proactive in receiving appropriate palliative care in the course of the cancer journey. In the case reported, an integration of palliative care in the treatment was not only found to have improved quality of life but also improved survival.

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