

CHEMO-RADIATION IN ADVANCED NASOPHARYNGEAL CARCINOMA, DISEASE FREE AFTER 6 YEARS-A CASE REPORT

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ABSTRACT

Summary: This is a case report of a patient with advanced nasopharyngeal Carcinoma, (T4 N2 MO) who had chemo-radiation with Cisplatin based chemotherapy and total midplane dose of 60 Gray external beam radiation. Six years after treatment patient has remained disease free and the primary site histologically confirmed disease free with no clinical evidence of regional or distance metastases

Key words: Advance nasopharyngeal carcinoma, chemo-radiation, disease- free.

INTRODUCTION

A great majority of nasopharyngeal carcinomas are of squamous cell origin and oftentimes-poorly differentiated^{1,2}. The incidence varies in different parts of the globe. It is a common tumour in some parts of North Africa³, and accounts for almost 80 percent of all malignant disease in parts of Southern China¹. The anaplastic variety predominates in high incidence areas. Nasopharyngeal carcinoma forms the bulk of the Head and Neck cancers seen in the Department of Otorrhinolaryngology of the University College Hospital Ibadan⁴. Like most other cancers seen in this Department, majority of the patients present in late stage III and IV. This has posed a lot of challenges for us, considering the situation in which we work a single Cobalt 60 machine for the teeming population of cancer patients.

Presenting this case of nasopharyngeal carcinoma underscores the fact that there is some hope in hopelessness.

Case Report

A 48 years old male nurse was referred to the Department of Otorrhinolaryngology of the University College Hospital (UCH), Ibadan in September 1998. He presented with a year's history of bouts of sneezing, rhinorrhoea, nasal obstruction and pain and inability to see with the right eye of 6 month duration. He had an episode of right nasal bleed that lasted for just two days

Past medical history revealed mild raised blood pressure, two years prior to presentation. He was a known peptic ulcer patient. He smoked cigarette for fourteen years and stopped ten years before onset of present ailment. He also stopped dinking alcohol fifteen years prior to onset of disease.

Clinical examination revealed a middle-aged man with proptosis, loss of vision with no light perception (NLP) in the right eye. Ear Nose and Throat (ENT) examination revealed engorged right turbinate, prominent left tonsil, and granular posterior wall. There were bilateral cervical lymph nodes. Investigations revealed a borderline E.C.G, negative Retroviral screening and normal values of full blood count and electrolyte and urea estimations. X-ray of the nasal sinuses showed engorged turbinates, antral mucosal thickening and cloudy ethmoid and sphenoid sinuses. Also a roundish opacity was seen in the postnasal space with obliteration of the anterior clinoid process while chest X-ray was normal. Histopathology of biopsy specimen of the nasopharynx showed infiltrating anaplastic carcinoma. The patient received concomitant chemo radiation with Cisplatin based chemotherapy, consisting of Cisplatin 40mg/m² and 5 fluorouracil 800mg/m² given 3 weekly to a total of 4 courses.

A midplane dose of 60Gray in 26 daily fractions was delivered to the primary site through external beam radiation therapy from Cobalt-60 mega voltage machine. Forty-five Gray in 20 daily fractions was delivered to the neck nodes. The chemo radiation was well tolerated. After a one-year default, patient represented with complaints of dry mouth and hearing loss in his right ear. Clinical review in conjunction with ENT review revealed excellent karnosky performance status (>90) without signs suggestive of loco regional or distant metastasis. Two years post chem. radiation, he presented again with a complaint of blurred vision in the left eye. Ophthalmology review was requested.

Patient however, traveled to Egypt and while there, he had CT-scan of the base of skull and neck region. CT-scan of the base of skull showed derangement of the right bony nasal wall, irregularity of the right optic canal, cloudiness of the right

posterior ethmoid cell, asymmetry of the nasopharyngeal soft tissue and of the supraglottic region was also noted. There was neither intracranial disease nor cervical lymph node enlargement. Multiple biopsy specimens from the nasopharynx showed dense fibrotic tissue with no evidence of neoplasia or significant cellular dysplasia. A medical report from the Kars El-Aimi School of Medicine Egypt concluded an excellent performance status with no evidence of loco regional disease. He is still being followed up, and has remained disease free as at November 2004.

DISCUSSION

The focus of this presentation is the histopathological confirmation of cure of stage (T4N2MO) anaplastic carcinoma of the nasopharynx. The patient presented with a right proptosis and no perception of light (PL) in the right eye and also involvement of the 4th cranial nerve, which makes it a T4 tumour (UICC). Cranial nerve rather than base of skull involvement is the single most important adverse feature associated with the primary diseases¹. A three-dimensional conformal boost technique used in a prospective protocol involving 21 patients with advanced nasopharyngeal carcinoma resulted in late radiation induced complication such as temporal lobe necrosis in a patient and sensory-neural hearing loss in 2 of the patients⁵. Concomitant chemo-radiation employed in the management of the patient, has been reported to achieve a higher complete response over induction chemotherapy followed by radiotherapy^{6,7}. Histological confirmation, however was not featured in this study. We here advocate confirmation as a component of long term survival criteria to give uniformity to interpretation of long term survival rates. The complications of optic nerve atrophy and hearing loss in the right ear noted in this patient are due to late effect of radiation because these areas

were within the treatment volume. However, these adverse effects are not absolutely unexpected compared to temporal lobe necrosis reported in some studies⁵.

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