Journal of Clinical & Experimental Radiology

Short Communication

A SCITECHNOL JOURNAL

Identification of clinical and pathological parameters To predict the efficacy of neoadjuvant chemotherapy In locally advanced oropharynx cancer - a Prospective study

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Abstract

The aim of the study is to evaluate the efficacy of Taxane based neoadjuvant chemotherapy in terms of tumor response and its effect on different morphological subtypes of oropharyngeal cancer followed by concurrent chemoradiotherapy in Indian scenario. Patients with locally advanced newly diagnosed, histological proven squamous cell carcinoma of the oropharynx were treated with neoadjuvant chemotherapy followed by concomitant chemoradiotherapy. These patients received treatment by 2D planning (Cobalt 60) method (two lateral opposed field and anterior neck) with shrinking field technique, total dose (60-70Gy) over 6-7weeks interval by conventional fractionation along with concomitant chemotherapy Inj.cisplatin 30mg/ m2 weekly. The primary end point was loco-regional response.The overall clinical RR after completion of 3 cycles of NACT was better than 2 cycles of NACT. Hence, it may be concluded that 3 cycles of NACT are better than 2 cycles but looking at OS and DFS 2 cycles appears to be better than 3 cycles with DFS and OS of 14.2months and 18.4months respectively, which is 8months and 16.2months with 3 cycles. As per stage, after 3 cycles of NACT the overall clinical RR in stage IV was (30.4%) and in stage III (21.7%) which is more than after 2 cycles, which again is an indicator of greater efficacy of 3 cycles then 2 cycles, but with limitations of smaller sample size and follow up duration.

Introduction

In India, head and neck cancer account for 30%-40% cancers at all sites, out of which 9.4% being the oral cavity and pharynx and is the sixth common cause of death in males and seventh in the females.1 Almost all of these malignancies originating from the mucosa of epithelium are the squamous cell carcinoma.2 In India, most prevalent sites are oropharynx and oral cavity followed by larynx and hypopharynx respectively.3 Carcinoma oropharynx forms the largest group and comprises less than 0.5% of all cancers in men.4,5 The most common primary site involved is base of tongue and tonsil.4–7 According to NCRP, ICMR, Hospital Based Cancer Registry 2004-2006, Bangalore the number of oropharyngeal cancer is 184 per year (6.36%) while Population based cancer registry, Chennai, Adyar,is 5.4%.8 Incidence increases with age (i.e. 4th and 5th decades of life) and male to female ratio is 4:1.9–11 The commonest known etiological factor is tobacco abuse and smoking in approximately 90% of diagnosed cases.3,12 Majority of these patients (70-80%) are diagnosed as locally advanced disease (stage III/IV) with lymph node involvement in 30-50% at presentation,13 so treated with combined modality approach (neoadjuvant chemotherapy, concomitant chemoradiotherapy).14,15 The use of neoadjuvant chemotherapy is based on significant tumor destruction and thus rapid shrinkage of the primary and nodal tumor. Neoadjuvant chemotherapy followed by RT or chemoradiotherapy offers the added advantage of organ preservation in optimum cases.16 Based on these backgrounds, this study was planned to evaluate the efficacy of Taxane based neoadjuvant chemotherapy in terms of tumor response along with its effect on different morphological subtypes of oropharynx cancer in Indian scenario. This study will also look into the efficacy of sequential use of taxane based NACT followed by concurrent chemoradiotherapy

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