Clinical and Radiological Outcome in Non Metastatic Hypo pharyngeal squamous cell Carcinoma: A single Institutional experience.

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Background/Objective

Cisplatin based chemotherapy has been the standard of care in Head and Neck SCCA patients but its use in our population is frequently limited by significant toxicity, reduced compliance, poor tolerance and treatment interruptions, ultimately compromising disease control. Alternatively, Carboplatin-Paclitaxel based chemotherapy used both in induction and concurrently with radiation, appears to be better tolerated, and emerging evidence suggests it may provide superior tumor control.

Objective is to determine clinical and radiological response, and to evaluate tumor control, disease free survival and progression free survival.

METHODS

After taking Ethical committee and IRB approval of this retrospective study, a total of 73 patients diagnosed with hypo pharyngeal squamous cell carcinoma treated with carboplatin paclitaxel-based induction chemotherapy followed by concurrent chemo radiation with same chemo regimen were enrolled in the study. Treatment tolerance, compliance and toxicity were recorded at regular intervals. Acute toxicity (within 90 days of the start of therapy) and late toxicities were assessed at 6, 12, and 18 months from start of chemo radiation as per RTOG criteria. Treatment response was assessed by clinical examination and radiological evaluation. Survival outcomes, including disease free survival and progression free survival were analyzed.

TREATMENT

Out of 73 patients, 16 patients were excluded as 6 patients did not complete their planned treatment 3 of them didn't showed up, and 7 patients were planned for alternative/palliative treatment as per their clinical demand.

57 evaluable patients receives carboplatin-paclitaxel based induction chemo followed by concurrent chemo radiation with same chemotherapy regimen. Response evaluation was done periodically after completion of treatment and patients were categorized as per RECIST criteria (version 1.1). Table 1,2, and 3 lists the baseline demographic and clinical characteristics, site distribution and toxicity profile.

TABLE 1. SUB SITE DISTRIBUTION

Site	*No*	*%*
Post Cricoid	46	81%
Posterior pharyngeal wall	6	10%
Pyriform sinus	5	9%

TABLE 2. Table 1: Baseline demographic and clinical characteristics

Baseline characteristic	*No.*	*%*
Sex		
Male : Female	32 : 25	56% : 44%
Tumor Size		
T1-T2	38	67%
T3-T4b	19	33%
Grade		
Grade I	6	10.5%
Grade II	45	79%
Grade III	6	10.5%
Nodal status		
N0	11	19%
N1	21	37%
N2	18	32%
N3	7	12%
Stage		
II	4	7%
III	30	53%
IVA	23	40%

TABLE 3. Toxicity Profile

Toxicity	*No*	*%*
Dysphagia	38	67%
Acute skin	36	66%
Mucositis	44	77%
Xerostomia	25	43%

RESULTS

Complete clinical and radiological response (CR) was observed in 29 patients (51%). Partial response (PR) was noted in 8 patients (14.0%), while stable disease (SD) occurred in 10 patients (18%). Progressive disease (PD) noted in 8 patients (14%).

Of 57 patients treated 35 patients (61.4%, 95% CI 48.4-72.9) are alive and disease free at last follow up, 12 patients (21.1%, 95% CI 12.5-33.3) died, and 10 patients (17.5%, 95% CI 9.8- 29.4) were lost to follow up. Table 4, lists the Clinical and Radiological outcome and DFS.

TABLE 4. Response evaluation by RECIST Criteria Clinical + Radiological response

Tumor response category	*No.*	*%*
No. of Alive patients.	35	(61.4%, 95% CI 48.4-72.9)
No. of patients died	12	(21.1%, 95% CI 12.5-33.3)
Lost to follow up	10	(17.5%, 95% CI 9.8- 29.4)
CR	29	51%
PR	8	14%
SD	12	21%
PD	8	14%

Measure	Median Survival	12M	18M
PFS	58.5 M	85.3%	80.0%
DFS	58.7 M	87.4%	82.2%

CONCLUSION

Carboplatin-Paclitaxel-based induction chemotherapy followed by concurrent chemoradiation appears to be a tolerable and effective treatment approach for hypo pharyngeal SCCA. It can serve as a viable alternative for patients with hypopharyngeal SCCA patients.

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