

COMPARISON OF OUTCOMES WITH HYPOFRACTIONATED PALLIATIVE RADIOTHERAPY 'CHRISTIE REGIMEN' VERSUS STANDARD PALLIATIVE RADIATION IN HEAD AND NECK SQUAMOUS CELL CARCINOMA

Aim:

To compare the efficacy and toxicity profile of patients with squamous cell carcinoma of the head and neck (HNSCC) treated with Hypofractionated palliative radiotherapy 'Christie Regimen' versus Standard Palliative radiation

Methods and Materials:

About 60 cases of locally advance Head and Neck cancers were analyzed in 2 arms. Patients were treated with 300 cGy /10 # / 30 Gy / 2 weeks in Arm A (Control arm), and 312.5 cGy / 16 # /50 Gy /3.1 weeks in Arm B (Study arm)

Results:

At the end of the study Response, Toxicities and QOL assessed.

	Arm A	Arm B
Complete Response (CR)	9 (30%)	12 (40%)
Partial Response (PR)	16 (53.33%)	17 (56.66%)
Static Disease (SD)	5 (16.66%)	1 (3.33%)

Locoregional control after the completion of treatment was complete response (CR) (30% and 40%), partial response (PR) (53.33% and 56.66%), and no response (SD) (16.66% and 3.33%) in Arm A and Arm B respectively, but this was not statistically significant ($P = 0.209555$).

Grade II Skin reactions were observed more in both the arms 53.33% and 56.66% in Arm A and Arm B respectively. Grade III radiation skin reactions were 6.66% and 10% in Arm A and Arm B respectively. And also Grade I and II mucosal reactions were observed more in Arm A and Arm B 46.66% vs 40% and 40% vs 46.66%, respectively. Grade III radiation mucosal reactions were equal in both groups (13.33%), statistically not significant. In Oesophagus, Larynx and Salivary glands also Grade III and Grade II reactions are common in both groups.

The patients were followed for a minimum period of 6 months. Quality of Life improvement at the end of 6 months was Pain improvement (28% and 59.25%), Performance status improvement (36% and 62.96%), and Weight loss improvement (20% and 33.33%) in Arm A and Arm B respectively.

Conclusion:

Hence, it can be concluded that although there was no significant difference in Response rates, QOL improvement was in favor of Christie regimen schedules with manageable toxicities. The total time needed were less in hypofractionated radiotherapy regimen, and this radiobiological superiority is beneficial for centers like ours where the patient load is much higher than the facility available for radiation. Further studies with longer follow-up will be needed for confirmation to establish the long-term effects of this regime.

Keywords: Hypofractionated RT, Christie Regimen, Palliative radiotherapy, Head and Neck cancer