

# **Comparison of low dose daily Cisplatin versus weekly Cisplatin concurrently with accelerated radiotherapy in locally advanced head and neck cancers.**

## **Aim & Objective:**

To evaluate and compare the immediate loco regional response rates in locally advanced squamous cell carcinomas of the head and neck treated with low dose daily Cisplatin versus weekly Cisplatin concurrently with accelerated radiation and also to assess and compare the acute toxicity in both arms.

## **Materials and methods:**

This double arm prospective study was conducted in dept of radiotherapy, MMC between October 2016 to august 2017 with sample Size of 30 patients in each arm in Stage 3 &4 locally advanced head and Cancers with squamous histology excluding nasal cavity and nasopharynx patients. The mean age of the patient was around 50 years, mostly males with ECOG status 0-1.

Arm 1 was given low dose daily Cisplatin 6 mg/m<sup>2</sup> in 50ml NS Over ten minutes after hydration with 500 ml NS one hour before RT on OP basis with anti emetics only. Arm 2 was given weekly Cisplatin 40 mg/m<sup>2</sup> with proper premedication and hydration. RT was same in both arms, given as accelerated RT of 2Gy per fraction in 35 fractions of 70

GY, 6 days per week in a phased manner completed in 6 weeks. All patients were assessed weekly by clinical examination and with a CECT Neck, 4 -6 weeks after completion of treatment.

**Result:**

In arm 1, 24 (80%) patients had complete response and 6 (20%) had partial response. In arm 2, (73%) 22 had complete response and (27%) 8 had partial response. Acute toxicities like dermatitis, mucositis, dysphagia, laryngitis were observed in both arms but slightly more in arm 2 which was manageable.

**Discussion:**

Low-dose daily Cisplatin offers ease of administration in the outpatient clinic obviating the need for hydration, diuresis, prophylactic antiemesis, and hospitalization without increasing long-term toxicity and also with good complete response than weekly schedule, provided extra caution is adopted before and during treatment. Low dose Cisplatin is not inferior to weekly Cisplatin schedule and it is comparable. Based on this, it can be recommend in centers that are overburdened with patients provided, they have enough supportive man power in terms of nurses and dietician who can take care and advice regarding nutrition and hydration.