

## **Accelerated bifractionated radiation with concurrent cisplatin administration in locally advanced head and neck cancer: a feasibility study.**

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### **Source**

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### **Abstract**

#### **AIMS AND BACKGROUND:**

To test the feasibility of accelerated interrupted twice-daily radiation and concurrent cisplatin administration in patients with locally advanced head and neck cancer.

#### **PATIENTS AND METHODS:**

Nineteen patients with locally advanced head and neck cancer were treated with accelerated bifractionated radiation with concurrent administration of cisplatin. There were 18 men and 1 female with a median age of 60 years (range, 17-71) and median performance status of 90 (range, 80-100). Sixteen patients (85%) presented with stage IV disease. Primary site included the nasopharynx (n = 7), oropharynx (n = 5), hypopharynx (n = 1) and larynx (n = 6). Radiation consisted of two fractions of 1.6 Gy each daily, five times weekly to a total dose of 64 Gy. Cisplatin was administered at a dose of 100 mg/m<sup>2</sup> on days 2 and 28 of the treatment period.

#### **RESULTS:**

Nine patients achieved a complete response (47%; 95% CI, 25%-70%) and 5 a partial response (26%; 95% CI, 7%-46%). Grade III-IV toxicity included leukopenia (16%), mucositis (26%), dry mouth (5%), weight loss (16%) and infection (5%). After a median follow-up of 27.11 months (range, 1-33 +), 9 patients have died. Median time to progression was 11 months (range, 1-32 +) and median survival 25 months (range, 1-32 +).

#### **CONCLUSIONS:**

Accelerated twice-daily radiation with concurrent cisplatin is effective in locally advanced head and neck cancer and can be safely given with manageable toxicity.