

Induction chemotherapy followed by concomitant radiotherapy and weekly cisplatin versus the same concomitant chemoradiotherapy in patients with nasopharyngeal carcinoma: a randomized phase II study conducted by the Hellenic Cooperative Oncology Group (HeCOG) with biomarker evaluation.

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Source

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Abstract

BACKGROUND:

Concomitant administration of radiation therapy (RT) and chemotherapy with cisplatin (CCRT) is considered standard treatment in patients with locally advanced nasopharyngeal cancer (LA-NPC). The role of induction chemotherapy (IC) when followed by CCRT in improving locoregional control remains controversial.

PATIENTS AND METHODS:

Totally, 141 eligible patients with LA-NPC were randomized to either three cycles of IC with cisplatin 75 mg/m², epirubicin 75 mg/m² and paclitaxel (Taxol) 175 mg/m² (CEP) every 3 weeks followed by definitive RT (70 Gy) and concomitant weekly infusion of cisplatin 40 mg/m² (investigational arm, 72 patients) or to the same CCRT regimen alone (control arm, 69 patients).

RESULTS:

Sixty-two patients (86%) received three cycles of IC. No difference between the arms was observed in the number of patients who completed RT (61 versus 64, P = 0.18). Overall and complete response rates were very similar in the two arms and so were 3-year progression-free and overall survival rates. Grade III or IV toxic effects from IC were infrequent, apart of alopecia. Mucositis, weight loss and leukopenia were the most prominent side-effects from CCRT.

CONCLUSION:

IC with three cycles of CEP when followed by CCRT did not significantly improve response rates and/or survival compared with that of CCRT alone.