

Treatment of advanced medullary thyroid cancer with an alternating 5 FU-dacarbazine

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Abstract

Introduction: Medullary thyroid carcinoma (MTC) is a neuroendocrine tumor which arises from thyroid C-cells. It accounts for 5 to 10% of all thyroid cancers. Total thyroidectomy with lymph node dissection is the main treatment when the disease is confined to the neck. Dacarbazine (DTIC), also known as imidazole carboxamide, is a chemotherapy medication used in the treatment of melanoma and Hodgkin's lymphoma. For Hodgkin's it is often used with vinblastine, bleomycin, and doxorubicin. It is given by injection into a vein. Common side effects include loss of appetite, vomiting, low white blood cell count, and low platelets. Other serious side effects include liver problems and allergic reactions. Dacarbazine is in the alkylating agent and purine analog families of medication.

Methods and Results: Their mean age was 49 years (range 30–79). There were 25 males and 11 females. Among them, 19 had undergone a total thyroidectomy with bilateral cervical lymph node dissection, and 10 had received post-operatively external radiotherapy to the neck and mediastinum. Seven patients were not operated on for diffuse distant metastases at presentation or locally advanced disease. None of them had previously been treated with chemotherapy.

Results: The 37 patients entered into this trial were evaluable for toxicity and response. Each patient received an average of 6 (range 7 to 5) cycles of doxorubicin-streptococci and 5-FU-dacarbazine. Five of the 7 patients with invalidating symptoms before starting chemotherapy had a partial symptomatic response. Three partial tumor responses were obtained after 1, 3 and 2 cycles of chemotherapy, and lasted 11, 19+ and 10 months, respectively. Calcitonin level decreased by 72%, 86% and 68% respectively, and CEA level was stable in one patient, was normal in one before therapy, and decreased by 55% in one.

Conclusion: Considering that all patients included in the trial were affected by a rapidly progressing disease, these results confirm the potential benefits of cytotoxic chemotherapy, and are in agreement with the results obtained with the association of epirubicin, dacarbazine and 5-FU.

Keywords: thyroid cancer, 5 FU-dacarbazine, DTIC, chemotherapy