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Platinum-based chemotherapy of primary extragonadal germ cell tumours: the Hellenic Cooperative Oncology Group experience.

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Source

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Abstract

Extragonadal germ cell tumours (EGCT) are uncommon, most frequently arise in the mediastinum and retroperitoneum and have variable responses to platinum-based chemotherapy. A retrospective analysis was performed on 38 patients with EGCT treated with cisplatin-based (CDDP) or carboplatin-based (CBDCA) chemotherapy between 1984 and 1998. Twenty-four patients had nonseminomatous germ cell tumours (NSGCT) and 14 seminoma. Twenty-two tumours arose in the mediastinum (13 nonseminomas, 9 seminomas) and 16 in the retroperitoneum (11 NSGCT, 5 seminomas). Initial surgery included complete resection in 1 patient, biopsy in 27 patients and debulking surgery in 10 patients. Complete response rates with chemotherapy +/- surgery were as follows: mediastinum 14 of 21 (66.66%) patients (8 of 12-75% NSGCT, 6 of 9-66.66% seminomas) and retroperitoneum 14 of 16 (87.5%) patients (9 of 11-81.81% NSGCT, 5 of 5-100% seminomas). One patient who underwent complete resection of a mediastinal malignant teratoma combined, received PVB chemotherapy on an adjuvant basis and remains alive and disease-free. Three additional seminoma patients who achieved partial response after chemotherapy remain alive and disease-free following mediastinal radiotherapy. All 14 patients with extragonadal seminomas remain alive with no evidence of disease at a median follow-up of 49 months (range 7-164), giving an overall survival of 100%. Nine of 13 (69.23%) patients with mediastinal NSGCT are long-term disease-free at a median follow-up of 43.5 months (range 7-152). Nine of 11 (81.81%) patients with retroperitoneal NSGCT remain alive and disease-free at a median follow-up of 56 months (range 14-110). Complete surgical resection of residual mass was undertaken in 10 patients (3 seminomas, 7 nonseminomas). The histology revealed necrosis/fibrosis in 6 patients (3 seminomas, 3 NSGCT) and viable cancer in 4 patients. Patients who had viable malignant cells in the resected specimens received two more courses of VelP chemotherapy. None of our patients had relapsed at the time of this analysis. None of our 6 patients who underwent testicular biopsy (1 patient) or orchiectomy (5 patients) due to suspicious ultrasound of the testis were found to have testicular tumour or fibrotic scar. In conclusion, this retrospective analysis showed significant responses in patients with either mediastinal or retroperitoneal NSGCT treated with CDDP- or CBDCA-based chemotherapy +/- surgery. All patients with extragonadal seminomas remain alive with no evidence of disease, regardless of the site at presentation.