

Brain metastases from epithelial ovarian cancer. The Hellenic Cooperative Oncology Group (HeCOG) experience and review of the literature.

[Pectasides D](#), [Aravantinos G](#), [Fountzilias G](#), [Kalofonos C](#), [Efstathiou E](#), [Karina M](#), [Pavlidis N](#), [Farmakis D](#), [Economopoulos T](#), [Dimopoulos MA](#).

Source

Second Department of Internal Medicine-Propaedeutic, Oncology Section, University General Hospital Attikon, Haidari, Athens, Greece. pectasid@otenet.gr

Abstract

BACKGROUND:

Brain metastases from epithelial ovarian cancer (EOC) are rare. A retrospective study of all patients diagnosed with brain metastases from EOC over the last 20 years, according to the Hellenic Cooperative Oncology Group (HeCOG) tumor registry, was conducted.

PATIENTS AND METHODS:

A total of 1450 patients with EOC were treated within various HeCOG protocols from 1983 to 2004. Seventeen (1.17%) of them developed brain metastases.

RESULTS:

The median age at diagnosis of brain metastases was 58 years (range, 24 to 77). At initial diagnosis, 2 patients had stage II, 12 had stage III and 3 had stage IV disease. Serous papillary adenocarcinoma was the most common histological subtype [12 patients (71%)]. All patients had received initial cisplatin-based chemotherapy. The median time from initial diagnosis to central nervous system (CNS) relapse was 15.9 months (range, 1.4 to 70.8). The CNS was the only site of disease in 13 (76.5%) patients, whereas 4 (23.5%) patients had additional extracranial disease. Two (12%) patients with isolated single brain lesions underwent surgical excision of the metastases, followed by whole brain radiation therapy (WBRT) and chemotherapy. Four (24%) patients were treated with WBRT alone, 6 (35%) patients with WBRT plus chemotherapy and 2 (12%) had only supportive care, while 3 (18%) patients decided not to have any further treatment after the diagnosis of brain metastases. The median survival time from diagnosis of CNS relapse was 5.7 months (range, 0.2 to 22.6) and the median survival time from diagnosis of EOC was 27.4 months (range, 3.0 to 71.4). In patients with CNS recurrence as the only site of disease, the median survival time from diagnosis of CNS relapse was 5.3 months (range, 0.6 to 22.6) and in those with both CNS and extracranial disease, the median survival time was 3.9 months (range, 0.2 to 11.9) ($p=0.5597$). There was a statistically significant difference in survival for those treated with WBRT plus chemotherapy (10.0 months) versus those treated with WBRT alone (1.5 months) and those who had only supportive care (0.2 months) ($p=0.0003$).

CONCLUSION:

The incidence of cerebral metastases in our patients with EOC was 1.17%, which is consistent with the mean value of all series reported in the literature. The prognosis of patients with brain metastases from EOC is poor. Patients who had WBRT and chemotherapy fared better than those who received WBRT alone.