NEURO-ONCOLOGY

Abstracts

P08.14. SURVIVAL OF BREAST CANCER PATIENTS WITH SYNCHRONOUS OR METACHRONOUS CNS METASTASES
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BACKGROUND: Central nervous system (CNS) metastases represent a serious complication for breast cancer patients. This retrospective survey examines overall survival of unselected patients diagnosed with synchronous or metachronous CNS metastases to establish patient and tumour characteristics as well as treatment modalities affecting patients’ prognosis.

PATIENTS AND METHODS: Information on 732 breast cancer patients with CNS metastases was retrieved from the Netherlands Cancer Registry (NCR) database. Over the period 2004-2010, we identified 163 patients who presented with synchronous CNS metastases, 142 of which involved brain parenchymal metastases. 569 Patients who were initially disease-free developed metachronous CNS metastases during follow-up, and 489 of them were diagnosed with brain metastases. We measured patients’ overall survival from the date of metastatic diagnosis, and the impact of prognostic factors on survival was assessed both univariately and multivariately using extended Cox-regression models. RESULTS: For all patients, triple-negative breast cancer and abstinence of systemic therapy proved prognostically unfavourable. In addition, surgery for the primary tumour and metastasectomy appear to improve survival in patients with synchronous CNS metastasis. In patients with metachronous metastases, higher initial stage (III) and the occurrence of other metastases prior to and simultaneously with CNS metastasis were associated with poorer survival whereas younger age (<50 years) and a prolonged time interval until metastatic diagnosis (>1 year) are prognostically favourable. Although metastasectomy and radiation therapy also showed an association with improved survival, their impact varied time-dependently and they were therefore included in our model as time-varying covariates. CONCLUSIONS: Triple-negative disease and abstinence of systemic therapy constitute prognostically unfavourable factors for all patients with CNS metastases. Other factors affecting survival vary between synchronous and metachronous metastasis. With respect to therapeutic factors, the impact of selection bias and hence overestimation of treatment effects should be kept in mind.