Neoplastic meningitis-related prognostic significance of the Karnofsky performance status.

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BACKGROUND: The prognostic significance of Karnofsky performance status in neoplastic meningitis (NM) has not been demonstrated in patient groups similarly matched for known prognostic variables. OBJECTIVE: To determine the effect of performance status on survival in NM. DESIGN: Retrospective comparison. SETTING: A university tertiary medical center. PATIENTS: Two well-matched cohorts with cytologically positive NM with (n = 30; group A) and without (n = 30; group B) independence in activities of daily living as defined by a Karnofsky performance status score of 70 or greater or less than 70, respectively. MAIN OUTCOME MEASURES: Groups were matched on age, primary tumor, site of NM disease (cranial nerves or spinal cord), treatment (radiotherapy and chemotherapy; systemic and intraventricular), and absence of cerebrospinal fluid compartmentalization, NM-related encephalopathy, and neuroradiographic bulky central nervous system disease. Primary tumor histologic diagnoses included breast cancer (20 patients), non-Hodgkin lymphoma (10 patients), lung cancer (10 patients), melanoma (8 patients), and others (12 patients). At presentation, NM revealed cranial neuropathy (30 patients) or spinal cord dysfunction (39 patients). Radiotherapy was administered to 49 patients (whole brain only in 12 patients; restricted spine only in 35; whole brain and restricted spine in 2). All the patients received intraventricular chemotherapy, and 49 received concurrent tumor-specific systemic chemotherapy. RESULTS: Median survival was 6 weeks (range, 3-10 weeks) in group B compared with 15.5 weeks (range, 8-58 weeks) in group A (P < .001). No treatment-related deaths were observed. All the patients demonstrated progressive disease and died of either NM or systemic cancer. CONCLUSIONS: A low Karnofsky performance status score predicts poor survival in patients with NM. Patients with a low Karnofsky performance status score may be best served by offering supportive care.

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