Leptomeningeal carcinomatosis: prognostic implications of clinical and cerebrospinal fluid features.


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BACKGROUND: Leptomeningeal carcinomatosis (LC) represents a devastating complication of systemic cancer, and patients with LC have a dismal prognosis and increased mortality. The few studies that have focused on the evaluation of prognostic factors in patients with LC have resulted in contradictory results. Thus, the treatment of LC remains controversial, and no straightforward guidelines exist in the literature. The objective of the current study was to identify prognostic markers related to LC survival to better select patients who are eligible for intensive treatment.

METHODS: Seventy patients who had a diagnosis of LC were reviewed, and clinical data, cerebrospinal fluid (CSF) parameters, tumor-related characteristics, and treatment information were registered. The impact of single parameters on overall survival was determined by both univariate and multivariate analyses.

RESULTS: The multivariate analysis revealed that Radiation Therapy Oncology Group score<or=2 (P=.028), a glucose level in CSF>or=2.7 mmol/L (P=.001), the presence of infratentorial symptoms at onset (P=.026), and intrathecal treatment (P<.001) were associated independently with longer overall survival in patients with LC. In addition, the same clinical factors also predicted response to treatment in such patients.

CONCLUSIONS: The predictive factors for patients with LC that were identified in this study could help to better select patients who are more likely to benefit from chemotherapy. Copyright (c) 2009 American Cancer Society.

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