Spinal metastases outcome

Despite advances in therapies using radiation oncology and spinal oncological surgery, there is a subgroup of patients with spinal metastases who suffer from progressive or recurrent epidural disease and remain at risk for neurological compromise.

The prognosis with respect to survival essentially depends on the biology of the primary tumor: two-year survival rates for patients with spinal metastases range from 9% (lung cancer) to 44% (breast or prostate cancer) [1].

Preoperative status, invasiveness, blood loss> 500 ml, and blood transfusions are independent predictors associated with a higher risk of complication [2].

Data from the largest prospective surgical series of patients with symptomatic spinal metastases revealed that tumor type, the number of spinal metastases, and the presence of visceral metastases are the most useful predictors of survival and that quality of life is best predicted by preoperative Karnofsky Performance Score, Frankel, and EQ-5D scores. The Karnofsky score predicts quality of life and survival and is easy to determine at the bedside, unlike the EQ-5D index. Karnofsky score, tumor type, and spinal and visceral metastases should be considered the 4 most important prognostic variables that influence patient management [3].

Primary tumor type, presence of visceral metastases and performance status are significant predictors for survival after surgery for symptomatic SEM and should be evaluated before deciding on the extent of treatment. More accurate prediction models are needed to select the best treatment option for the individual patient [4].

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