

<Background>

The number of patients with primary malignant bone and soft tissue tumors in Japan is increasing in line with the increasing size of the elderly population. The aim of this study was to determine the prognostic factors for elderly patients.

<Methods>

The clinical data from 90 patients aged ≥ 65 years with primary malignant bone or soft tissue tumors (bone 19 and soft tissue 71), treated at our institution between 1993 and 2013, was collected. Clinical information before treatment and tumor type, location, size, depth, grade and American Society of Anesthesiologists-Physical Status (ASA-PS) score was evaluated to identify prognostic factors using the Cox proportional hazards regression model. The 5-year survival rate was evaluated using the Kaplan–Meier method.

<Results>

The average follow-up period was 44.8 months and the 5-year overall survival rate was 77.5%. In the multivariate analysis, ASA-PS score and high-grade sarcoma were associated with worse overall survival. There was no significant difference between the patient group aged 65–74 years and that aged ≥ 75 years.

<Discussion>

Aging is generally related to physically reduced function and an increased prevalence of comorbidities. We expected that high age might be a predictive factor for poor prognosis. However, it was found in the present study as a new finding that the ASA-PS score and tumor grade were significant factors, but high age was not. Consequently, treatment of elderly patients with primary bone and soft tissue tumors should not be based on age.

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