

Skeletal metastasis of unknown primary origin at the initial visit: A retrospective analysis of 286 cases

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Abstract

Background:

Skeletal metastasis is a common metastatic event for several carcinomas, and the treatment for skeletal metastasis of unknown primary (SMUP) are a critical issue in cancer therapy. Making a diagnosis of the primary site is the most crucial step in the treatment of SMUP; however, the procedures are sometimes difficult and time-consuming, and the primary site often remains unknown. Therefore, to establish

optimal diagnostic strategies and elucidate the overall survival rates of SMUP, we conducted this retrospective study.

Methods:

We retrospectively analyzed the clinical data for 286 SMUP cases from a total of 2,641 patients with skeletal metastases who were treated between 2002 and 2014 at our institutions.

Results:

The primary sites were identified in 254/286 patients (88.8%), while 32 (11.2%) primary sites were not detected by our diagnostic strategies. Lung cancer was identified in 72 (25.2%) cases, and was the most frequently observed primary lesion. The median survival time of the SMUP patients was 20.0 months, while the median survival times of solitary bone metastasis cases and multi-bone metastasis cases were 39.0 months and 16.0 months, respectively. The median survival times of prostate cancer cases was over 120 months, that of patients with primary lung cancers was 9.0 months and the median survival time of cases who were finally diagnosed with an unknown primary was 11.0 months.

Conclusions:

We believe that our study would contribute to establishing an optimal strategy for diagnosing the primary site in SMUP patients, and our data provide definite indications for the survival times for different SMUP situations.