Metastatic spinal cord compression as the first sign of malignancy

Abstract

Background and purpose — Metastatic spinal cord compression (MSCC) as the initial manifestation of malignancy (IMM) limits the time for diagnostic workup; most often, treatment is required before the final primary tumor diagnosis. We evaluated neurological outcome, complications, survival, and the manner of diagnosing the primary tumor in patients who were operated for MSCC as the IMM.

Patients and methods — Records of 69 consecutive patients (51 men) who underwent surgery for MSCC as the IMM were reviewed. The patients had no history of cancer when they presented with pain (n = 2) and/or neurological symptoms (n = 67).

Results — The primary tumor was identified in 59 patients. In 10 patients, no specific diagnosis could be established, and they were therefore defined as having cancer of unknown primary tumor (CUP). At the end of the study, 16 patients were still alive (median follow-up 2.5 years). The overall survival time was 20 months. Patients with CUP had the shortest survival (3.5 months) whereas patients with prostate cancer (6 years) and myeloma (5 years) had the longest survival. 20 of the 39 patients who were non-ambulatory preoperatively regained walking ability, and 29 of the 30 ambulatory patients preoperatively retained their walking ability 1 month postoperatively. 15 of the 69 patients suffered from a total of 20 complications within 1 month postoperatively.

Interpretation — Postoperative survival with MSCC as the IMM depends on the type of primary tumor. Surgery in these patients maintains and improves ambulatory function.