Abstract:
Intradural cauda equina and conus medullaris tumors (CECMTs) are rare. Only a few large clinical series exist to date. Therefore, clinical symptoms, surgical complications, and outcomes are poorly understood. The aim of the present study was to evaluate outcome after surgery of CECMTs and to identify the factors associated with a worse clinical prognosis based on the results of a series with sufficiently high number of cases. All cases of intradural CECMTs treated surgically at the authors’ department between March 2006 and May 2012 were retrospectively evaluated. Arachnoid cysts and multifocal tumors were excluded. Sixty-eight adult patients met the inclusion criteria (35 female and 33 male patients; median age 56 years). Follow-up data were available for 72% (n = 49) in a median period of 9 months. Overall, 18 tumors were located intramedullary and 50 extramedullary. The majority were nerve sheath tumors (n = 27), ependymomas (n = 17), and meningiomas (n = 9). The most common preoperative symptom was pain. The rate of new transient postoperative impairment was 18% (n = 12), and new permanent deficits were observed in only 6% (n = 4). Overall neurological improvement was achieved in 62%. The reversibility of preoperative symptoms was related to the interval between the time of symptom onset and the time of surgery and to the presence of
preoperative neurological deficits. Surgery of ependymoma and carcinoma metastases was associated with a higher rate of morbidity. Intradural CECMTs present as a group of tumors with varying histological features and clinical symptoms. Symptomatic manifestation is usually unspecific, mimicking degenerative lumbar spine syndromes. Despite a significant risk of transient deterioration, early surgery is advisable because more than 94% of patients maintain at least their preoperative status and more than 60% improve during follow-up. The reversibility of preoperative symptoms is related to the duration between symptom onset and surgery and to the presence of preoperative neurological deficits. The prognosis for recovery from cauda equina or conus medullaris syndrome is less favorable than for other deficits. Surgery of ependymoma is associated with a higher morbidity rate than other benign entities.