SPINAL CORD TUMOR

Signs and symptoms

The symptoms seen are due to spinal nerve compression and weakening of the vertebral structure. Incontinence and decreased sensitivity in the *saddle area* (buttocks) are generally considered warning signs of spinal cord compression by the tumor.

Other symptoms of spinal cord compression include lower extremity weakness, sensory loss, and rapid onset paralysis. The diagnosis of primary spinal cord tumors is very difficult, mainly due to its symptoms, which tend to be wrongly attributed to more common and benign degenerative spinal diseases.

Spinal cord compression is commonly found in patients with metastatic malignancy. Back pain is a primary symptom of spinal cord compression in patients with known malignancy. It may prompt a bone scan to confirm or exclude spinal metastasis. Rapid identification and intervention of malignant spinal tumors, often causing spinal cord compression, is key to maintaining quality of life in patients.

Diagnosis

The diagnosis of primary spinal cord tumors is difficult, mainly due to their symptoms, which in early stages mimic more common and benign degenerative spinal diseases. MRI andbone scanning are used for diagnostic purposes. This assesses not only the location of the tumor(s) but also their relationship with the spinal cord and the risk of cord compression.

Treatment

Steroids (e.g. corticosteroids) may be administered if there is evidence of spinal cord compression. These do not affect the tumoral mass itself, but tend to reduce the inflammatory reaction around it, and thus decrease the overall volume of the mass impinging on the spinal cord.

- Radiotherapy may be administered to patients with malignant tumors. Radiation is usually delivered to the involved segment in the spinal cord as well as to the uninvolved segment above and below the involved segment.

- Surgery is sometimes possible. The goals of surgical treatment for spinal tumors can comprise of histologic diagnosis, tumor local control or oncological cure, pain relief, spinal cord decompression and restoration of neurological function, restoration of spine stability, and deformity rectification.

Some suggest that direct decompressive surgery combined with postoperative radiotherapy provide better outcomes than treatment with radiotherapy alone for patients with spinal cord compression due to metastatic cancer. It is also important to take into consideration the prognosis of the patients and their ambulation status at diagnosis, and treat accordingly.