

Spinal schwannoma recurrence

Spinal schwannoma recurrence is rare after total **excision** (except in **neurofibromatosis**). As schwannoma is a benign well encapsulated tumor, complete removal is expected from surgery. Recurrence is expected in cases of NF, but usually at a site different from previous site. In case of large dumbbell tumors if residual tumor is left recurrence can occur ¹⁾.

Recurrence of conventional spinal schwannomas is reported in less than 5% of surgical patients. Tumor recurrence typically occurs several years after initial surgical resection and appears to be associated with subtotal tumor removal ^{2) 3) 4)}.

Although several surgical series have discussed recurrence, very few have reported on risk factors for the recurrence of conventional spinal schwannomas located throughout different spinal segments ⁵⁾.

The rates of tumor recurrence following surgical resection have been reported as 4 to 6% in previous surgical series ^{6) 7) 8)}.

In the study of Fehlings et al., the rate of **recurrence** was 5.32% and patients with **tumor recurrence** tended to be younger. Most conventional **spinal schwannomas** occurred in the **lumbar spine**; however, when location of the initial lesion was examined, there was a greater recurrence in cervical and sacral segments. In fact, two out of fifteen (13.33%) cervical and two out of twenty sacral schwannomas recurred whereas only five out of 70 (7.14%) patients with a lumbar tumor experienced recurrence. In addition, univariate analyses showed that the major predictors of recurrence were an increased number of vertebral levels, larger overall tumor size, a greater measurement in the cranial-caudal direction, and an intralesional resection ⁹⁾.

^{1) 6)}

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