Commentary

Spinal neurofibroma presence is not surprising at NF1 patients. Especially with the common usage of MR imaging, it was defined that there is spinal neurofibroma at the important part of patients.[1] But in the presented case, neurofibromas are bilateral and localized at the sacrum so that hallmarks the case.[2] Sacral tumors are not common and usually they are metastases. Benign tumors, especially neurofibromas are rare among sacral tumors.[3] Our clinical observation is compatible with literature.

Most spinal neurofibromas do not give clinical symptoms and they are in much different localization and numerous on NF1 patients. In fact, there can be neurofibromas in different localizations on the same nerve. For this reason, it is difficult to understand the symptoms caused from spinal tumors or one of the periferic tumors. Which neurofibromas should be treated? This is important question for NF1 patients. Generally the symptomatic ones should be treated as the authors report. But for reason mentioned above, sometimes it is difficult the

answered this question. Also I think, the surgical decision cannot be independent of the size of the tumor for spinal neurofibromas.

In the surgical treatment of sacral tumors, malignity, localization, size, and invasion presence are important for choosing appropriate surgical approach. Posterior approach is recommended for tumors which are situated in sacrum.[4] Posterior approach is right choice for presented case because neurofibromas are situated in sacrum and they do not radiate to presacrum area clearly. But in these cases, preoperative radiological characteristics of tumor must be evaluated carefully. At the presenting case, sacral laminectomy is enough for safe excision of tumor according to tumor's characteristics. Sometimes en-bloc sacral resection is appropriate at malignant invasive tumors. Because vascularization of these tumors are high and operating inside that tumor could be quite problematic. Furthermore the sacrum make a barrier at the tumors which radiate to presacral area, and that situation may complicate surgical resection. Especially at the L5-S1 neurinomas, surgical corridor can be created by doing partial resections from sacrum for the part at presacral area.[5] Tumors are well-circumscribed, non-invasive, and they do not radiate to presacral area apparently at the presented case, so posterior approach is easy at them.

It should not be forgotten that neurofibromas are rarely malignant. Especially at giant neurofibromas (>5 cm) like the presented case, risk is higher.[6] Large tumor size, central necrosis, and lack of hypo-intense target at MRI support malignity.[7] This information must be considered at surgical planning and making an optimal effort for total resection of tumor must be done. "Patient did not experience any neurological deficit after sectioning an eloquent S1 root. Hence, especially in giant neurofibromas, if intact fascicles are not observed during surgery, one should attempt a complete excision and minimize the chances of recurrence in future." I think, the expression of the author's is important to planning to surgical treatment of giant neurofibromas.

After the surgery, there is not regression on patient neurological situation is explain by the authors in the report. As a presented in the report, the good result of extraction of giant spinal neurofibroma is motivated factor of the spinal neurofibroma surgery. Tumors character and carefully surgical dissection are the main component for surgical success. This report is a good example for totally resecting a giant neurofibroma which is totally embedded in sacrum by posterior approach. There is not large series about this subject at literature, so that increases the importance of these case reports.

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