LETTER OT EDITOR

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Paraganglioma of the Cauda Equina

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We would like to make the following observations, on the basis of our personal experience[3], in relation to the recent article by San OH[5] Spinal paraganglioma adherent to the cauda equina.

Firstly, we do not share the assertion of authors: "Locations in the cauda equina are exceptional"; in our review published in 2005 about previously 174 reported cases of lumbar paragangliomas, 57 patients (33.9%) had their tumor adhered to the cauda equina[3].

Secondly, the authors indicate that ependymomas are classified as WHO grade II-III, however, more than 90% of ependymomas located in the cauda equina-filum terminale are mixopapyllary (WHO grade I)[2,4].

Thirdly, we agree with the authors that the differential diagnosis must be made with ependymomas of the filum terminal, but also with other tumors in the same location as schwannomas and meningiomas. Paragangliomas are usually hypo- or isointense to the conus medullaris on T1-weighted sequences, whereas it is hyperintense on T2-weighted sequences, sometimes inhomogeneous, and in some cases cystic areas have been reported. After Gd injection, there was marked enhancement; in other cases a serpiginous area of flow voids was observed, which suggested vessels capping the tumor. Araki, et al.[1], suggested that this sign is a major clue to the diagnosis of a highly vascular lesion. Hypointense tumor margins on T2-weighted MR and proton-density imaging may indicate hemosiderin or ferritin from previous hemorrhages. It is dificult to distinguish paragangliomas from meningiomas and schwannomas because the latter are all hypo- or isointense with respect to the spinal cord on T1-weighted and iso- or hyperintense on T2-weighted images. Postcontrast enhancement, however, is homogeneous in schwannoma and meningioma, and no report of a low- intensity band or hemosiderin rim has been documented by MR imaging in cases of these tumors. Moreover, pre- operatively paragangliomas can be differentiated from these tumors based on the presence of hemorrhage and cyst formation in schwannoma and calcification in meningioma[6].

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