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LETTER TO THE EDITOR

Posterior fossa tumors in children with neurofibromatosis type 1 (NF1)

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Dear Editor,

I read with the greatest interest the paper "Posterior fossa tumors in children with neurofibromatosis type 1 (NF1)" by I. Pascual-Castroviejo et al. [1]. The authors reviewed their experience of 39 years that includes 600 patients with NF1 seen in the Service of Pediatric Neurology (University Hospital La Paz, Madrid). Patients with NF1 may develop both benign and malignant tumors of the central nervous system (CNS) and of the peripheral nerves. As expected, the most frequent lesions the authors found were optic pathway tumors, brain stem neoplasms, and plexiform neurofibromas. Six patients harbored neoplasms of the cerebral hemispheres, and only five individuals had posterior fossa tumors that consisted of three brain-stem gliomas, one cerebellar astrocytoma and one medulloblastoma. Histopathological verification was obtained in three of the five cases. In this series, only one patient out of five was diagnosed with medulloblastoma, attesting the infrequent incidence of this tumor in NF1. I would like to make some brief comments concerning this paper with your kind permission.

Firstly, according to our experience, the malignant nature of CNS neoplasms in NF1 should be suspected when facing growths arising in atypical localizations for NF1 or in tumors that behave in an unusually aggressive way.

Secondly, I would like to add to the authors' references, for completeness, two articles on the association of NF1 with medulloblastoma [2, 3]. Probably, these two references escaped from the authors' literature review due to known (and unavoidable) drawbacks that may occur when performing an electronic database search. The authors are right in commenting that posterior fossa malignancies in the context of NF1 are very infrequent, which is especially true in the case of medulloblastoma. In 2002, we reported our experience with medulloblastoma in NF1 and undertook a literature review [3]. In that paper, we suggested that medulloblastoma should be added to the list of brain tumors that are apt to occur in patients diagnosed with NF1. Robles Cascallar et al. had previously reported this association in 1992 [2].

Thirdly, I would like to acknowledge the vast and authoritative experience of the authors on neurocutaneous disorders and associated pathologies, including CNS and peripheral tumors, as demonstrated by their numerous publications on the subject. I would also like to congratulate Professor Pascual-Castroviejo and colleagues for attracting our attention towards this association between NF1 and posterior fossa tumors and for updating this topic for the journal's readers.

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References

1. Pascual-Castroviejo I, Pascual-Pascual SI, Viaño J, Carceller F, Gutierrez-Molina M, Morales C, Frutos Martinez R (2010) Posterior fossa tumors in children with neurofibromatosis type 1 (NF1). Childs Nerv Syst. doi:10.1007/s00381-010-1163-5
2. Robles Cascallar P, Contra Gomez T, Martín Ramos N, Scaglione Rios S, Madero Lopez L (1992) Asociación de neurofibromatosis 1 y meduloblastoma. An Esp Pediatr 37:57–58
3. Martínez-Lage JF, Salcedo C, Corral M, Poza M (2002) Medulloblastomas in neurofibromatosis type 1. Case report and literature review. Neurocirugia 13:128–131