Abstract POSTERS

☐ Neurological subacute complication in neurofibromatosis type 1 affected patient: a case report

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Introduction. NeuroFibromatosis type 1 (NF-1) is an autosomal dominant multisystem progressive genetic phakomatose (1/3.500), associated with recognized vasculopathy, including cerebrovascular manifestations.The purpose of this case report is to highlight the importance of investigating cerebrovascular disease in NF-1 affected patients and to prove the possible correlation between brain Magnetic Resonance Imaging (MRI) alterations and vascular manifestations.

Materials and Methods. We report the case of a 35 years old NF1 affected patient presenting at Emergency Hospital Service, with subacute dysarthria and walking disorder. The patient underwent 64 slices CT execution at our Neuroradiology Service, showing an extended bulbar-pontine hypodensity, without significant mass effect, and tumefactive right optic nerve, thus suspected for gliomas. No acute-subacute alterations were detectable. The patient, admitted to the Neurology Unit, underwent brain MRI, performed with a morphological imaging protocol: Diffusion Weighted Imaging, Fast Spin Echo T2, Fluid Attenuated Inversion Recovery, Gradient-echo, Spin Echo T1 weighted and T1-3D sequences, before and after contrast injection.

Results. MRI confirmed bulbar-pontine low grade glioma, right optic pathway glioma and some focal alterations, in particular, in left mesial temporal lobe and in periventricular white matter, first suspected for neurofibromatosis bright objects. Thus, focal neurological deficit dysarthria represented the manifestation of the identified expansive brainstem lesion (17% in NF-1).

Conclusions. We confirm the importance of investigating focal neurological deficits in NF-1 patients, above-all in acute presentation, to exclude possible related cerebral vasculopathy, since their implications in clinical management, prognosis and follow-up.

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