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Case report

Vascular parkinsonism sensitive to rotigotine therapy is found in aged patients: a clinical case description

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Summary. Previous and recent papers have pointed out several discussions about the so called 'Vascular Parkinsonism' (VP), particularly about some distinctive characteristics with respect to the Idiopathic Parkinson Disease (IPD); differences commonly described are sudden onset of extrapyramidal symptoms after a stroke, main involvement of lower limbs in diffuse brain microinfarcts (lower body parkinsonism), low, short in time or absent response to classic IPD therapy in all kinds of vascular brain pathologies. But few published studies have also emphasized some relationship linking brain morphological signs of vascular damage in elder patients suffering from diagnosed IPD, both 'normally' responding to classic Levodopa therapy or not. (www.actabiomedica.it)

Key words: vascular brain damage, extrapyramidal symptoms, pyramidal symptoms, vascular parkinsonism, Parkinson's disease, rotigotine

Previous and recent papers have pointed out several discussions about the so called 'Vascular Parkinsonism' (VP), particularly about some distinctive characteristics with respect to the Idiopathic Parkinson Disease (IPD); differences commonly described are sudden onset of extrapyramidal symptoms after a stroke, main involvement of lower limbs in diffuse brain microinfarcts (lower body parkinsonism), low, short in time or absent response to classic IPD therapy in all kinds of vascular brain pathologies. But few published studies have also emphasized some relationship linking brain morphological signs of vascular damage in elder patients suffering from diagnosed IPD, both 'normally' responding to classic Levodopa therapy or not.

We describe the case of D.C., 81 yrs old woman who came to physical examination owing to a typical resting tremor insidiously began at that moment about 3 month before in the distal upper left limb, subsequently involving lower left limb too, with progressive gait impairment, as she and her relatives reported. The objective examination showed a resting tremor of the left limbs, with predominance in the upper limb, slight but perceivable hypertonus of the same body side and, interestingly, pyramidal definite clinical body left side signs, like considerable hyperreflexia with enlargement of elicitable reflex areas and spastic-like internal rotation of the left foot, wich gave to the gait a clinical feature of a spastic limping streak and Babinsky sign. The foot feature was not reported as congenital. A brain magnetic resonance (RM) showed: "..vascular necrosis spotting in the white matter of brain hemispheres with prevalence of the lesional burden on the right hemisphere, the largest one being located close to the posterior white periventricular matter..". The UPDRS III score was 58, the H&Y score 2.0. The patient was treated with rotigotine transdermal patch up to 4 mg/24 h, afterwards underwent a control evaluation within two months, showing a clearcut improvement in gait, as she reported, while there was a reduction of tremor. After 6 months the UPDRS III scale showed a score of 40, H&Y resulted improved to 1.5, while the pyramidal signs were stable. It was than decided to

progressively try to increase dopamine-agonist therapy (to 6 mg/24 h and over), despite the overlapping of extrapyramidal and pyramidal clinical signs and the timing of symptoms coming out was coerent with the hypothesis of vascular parkinsonism.

This case has a double relevance due to both its slow debut and the imaging evidence of a vascular lesion charge predominant on the cerebral hemisphere contralateral to the growing extrapyramidal and pyramidal symptoms, and owing to the fact that it was necessary and successful the exclusive introduction of dopamine-mimetic therapy (i.e. rotigotine with transdermal patch) in a patient showing an intollerance to oral Levodopa: in fact the patient dropped the oral medication with L-dopa initially proposed due to dispepia, vomit, abdominal pain. We hypothesize that atherosclerosis could be one of the main factors in aethiology of Parkinson's Disease in the range of old age (i.e. over 75 yrs old); this should lead to modify the distinction between IPD and Vascular Parkinsonism (which can occur even at a very younger age after an ischemic or haemorragic stroke or vascular cerebral multiple lesions).

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