Delayed hemiparkinsonism after closed head injury

Hemiparkinsonismo tardio após traumatismo craniano fechado

Monalisa da Silveira Dias1, Pedro Renato Brandão1,2, Talyta Grippe1,3, Cassio Jovem4,5, Marcelo Gomes6, Flávio Faria Pereira1

A 40-year-old man complained of insidiously-reduced right arm dexterity, which started three years previously. He had had a severe closed head injury 19 years before. At the examination, he presented with rigidity, akinesia, and dystonia uniquely over the right side. According to Crouzon and Justin-Besancon, the criteria for traumatic secondary parkinsonism are severe trauma, brain concussion, and a temporal relationship between the trauma and symptoms1. In this patient, presynaptic dopaminergic imaging corroborated nigrostriatal denervation induced, presumably, by a previous traumatic hemorrhage. As a result, neuroimaging (Figures 1 and 2) showed specific features that validated the diagnosis of parkinsonism secondary to a traumatic etiology2,3.

Figure 1. Magnetic resonance imaging, with T2 (A), and susceptibility weighted imaging (B), discloses, in detail, a focal lesion with hemosiderin deposits, over the left cerebral peduncle and substantia nigra.

1Hospital de Base do Distrito Federal, Unidade de Neurologia, Centro de Distúrbios do Movimento e Doença de Parkinson, Brasília DF, Brasil;
2Congresso Nacional, Câmara dos Deputados, Departamento Médico, Brasília DF, Brasil;
3Universidade de Brasília, Faculdade de Medicina, Programa de Pós Graduação, Brasília DF, Brasil;
4Clínica Villa Rica, Brasília DF, Brasil;
5Hospital de Base do Distrito Federal, Departamento de Radiologia, Brasília DF, Brasil;
6Núcleos Medicina Nuclear, Brasília DF, Brasil.
Correspondence: Talyta Cortez Grippe; Faculdade de Medicina da Universidade de Brasília; Campus Universitário Darcy Ribeiro, Aa Norte; 70904-970 Brasília DF, Brasil; E-mail: talytagrippe@gmail.com
Conflict of interest: There is no conflict of interest to declare.
Received 18 November 2016; Received in final form 29 August 2017; Accepted 05 September 2017.
Figure 2. Scintigraphic imaging with single photon emission computed tomography shows normal $^{99m}$Tc-TRODAT uptake in the right striatum, and absence of the radionuclide concentration on the left side.

References

