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Delayed hemiparkinsonism after closed head injury

Hemiparkinsonismo tardio após traumatismo craniano fechado

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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 symptoms[1]. 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 etiology[2,3].

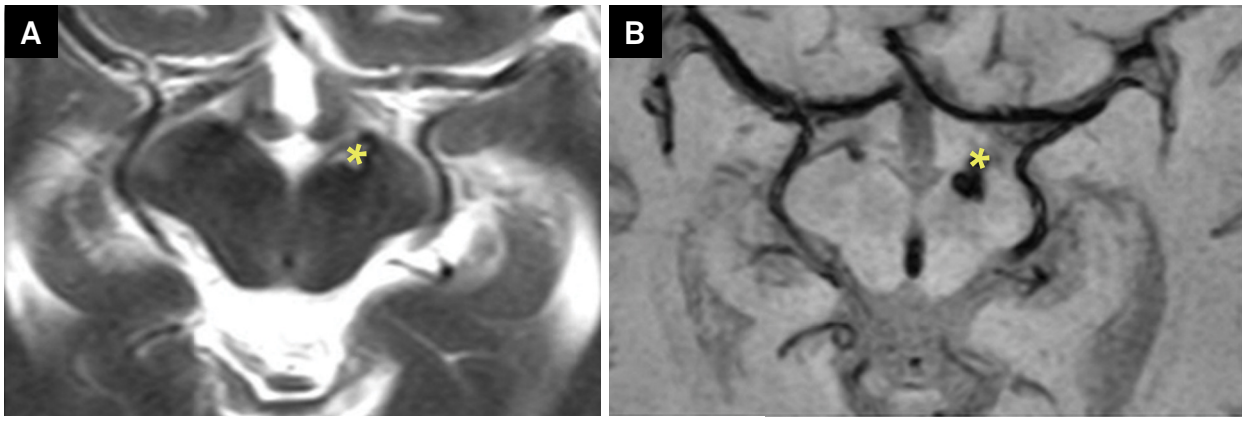

Figure 1. Magnetic resonance imaging, with T2 (A), and susceptibility weighted imaging (B), discloses, in detail, a focal lesion with hemosiderin deposits, over the left cerebral peduncle and substantia nigra.

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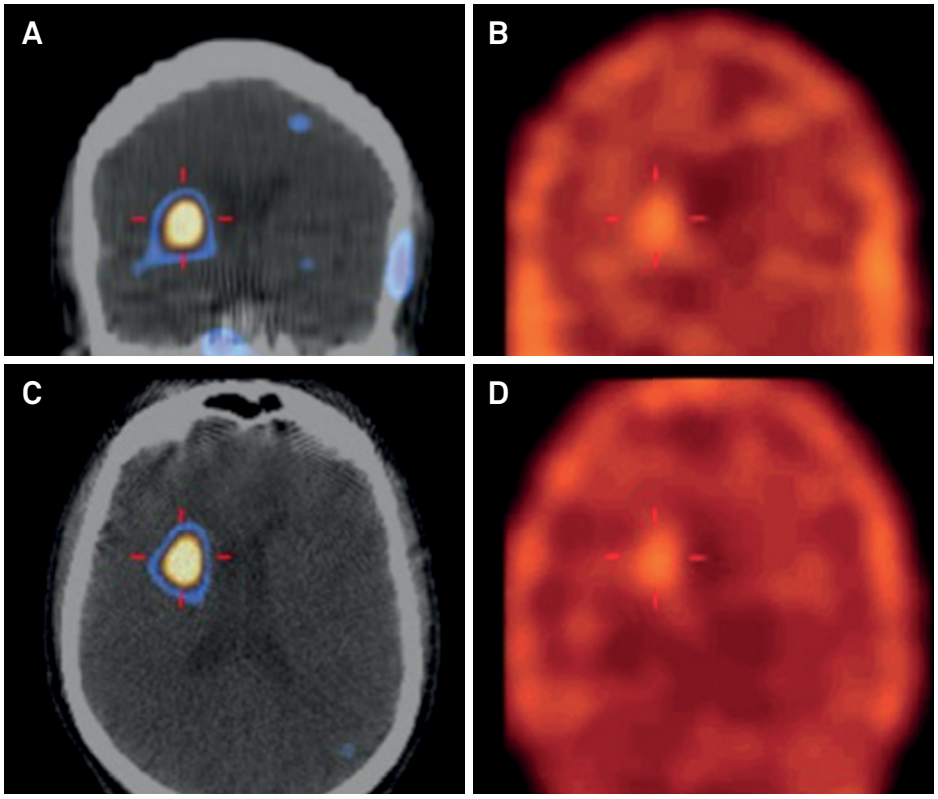

Figure 2. Scintigraphic imaging with single photon emission computed tomography shows normal ^{99m}Tc-TRODAT uptake in the right striatum, and absence of the radionuclide concentration on the left side.

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