for right upper-limb rigidity. In April 2006, he had undergone single photon emission computed tomography (SPECT) with DatSCAN that revealed a normal uptake at nigrostriatal levels. We repeated a SPECT with DatSCAN and revealed a bilateral loss of uptake particularly in the left putamen and in the left caudate nucleus. Uptake was normal in the right caudate nucleus. [^{18}F]fluorodeoxyglucose (FDG)-positron emission tomography (PET) revealed a normal cerebral metabolism. Clinical symptoms, SPECT findings, and the strong positive response during the L-dopa test led us to a diagnosis of Parkinson's disease. The patient also tested positive for human immunodeficiency virus (HIV+).

Neuropsychological evaluation revealed preserved cognitive functioning (episodic memory, attention, executive functions, abstract reasoning, visuospatial skills, limb praxis, and constructional praxis) with only a low level performance, even if within normal range, for delayed free recall on the Rey Auditory Verbal Learning Task. If there was a normal result in classic tasks for the assessment of executive functions based on the dorsolateral prefrontal cortex (Stroop Interference Test, Frontal Assessment Battery, Wisconsin Card Sorting Test, and Trail Making test), then performance on a task assessing executive functions based on the ventromedial prefrontal cortex showed impairment. During the Iowa Gambling Task,[1] a test for the assessment of decision making under ambiguous/uncertain conditions, the patient preferentially selected cards from risky, "long-term disadvantageous" decks, resulting in a final negative outcome (−955). Final balance between choices from advantageous decks [C+D] and choices from disadvantageous decks [A+B] reported a negative score (−6).

Patients who are HIV+ can present decision-making impairment,[2] correlated with deficits of inhibitory processes (Stroop Interference Test) and episodic memory. Patients with Parkinson's disease may also present decision-making impairment,[3] even if the underlying causal mechanism is not known. Some authors[3] propose that decision-making impairment is related to amygdala dysfunction, while other authors[4] suggest that it is related to impaired reinforcement learning, especially from negative feedbacks, due to the effects of dopamine replacement therapy on the orbitofrontal frontostriatal circuit.

Both movement disorders and cognitive dysfunction may represent the initial manifestation of HIV, probably due to the predilection of HIV infection to affect the basal ganglia and frontal white matter.[5] The cognitive performance of our patient (intact executive functions and impaired decision making) shows that the association of two diseases causing frontostriatal impairment, like Parkinson's disease and HIV, may produce a specific neuropsychological pattern, different from that usually associated with Parkinson's disease or HIV.

Our finding shows that in a patient with new concomitant diagnoses of Parkinson's disease and HIV, decision making can become impaired despite intact cognitive functioning. Our finding also confirms the usefulness of gambling tasks as a tool to detect early cognitive impairment in patients with HIV and patients with Parkinson's disease.

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Altered Sexual Orientation Following Dominant Hemisphere Infract

To the Editor: Human sexual behavior is a complex subject that has proved challenging to scientists of all disciplines. Psychological theories[1] as well as biological concepts[2,3] have been proposed to address sexual behavior and, in particular, human sexual orientation. The subject is further complicated by moral and ethical views widely prevalent in all societies. We report on a case of altered sexual orientation following an infarct in the left middle cerebral artery region.

Case Report

The patient, a 57-year-old right-handed man, sustained his first cerebral vascular accident in the right middle cerebral artery region at the age of 45, which resulted in right-sided hemiparesis that resolved completely within 3 months. He continued to run his private business successfully while living with his mother.

The patient lost his father in early childhood. There was no evidence of an emotional or conduct disorder during school years, and the patient eventually obtained his university degree. He continued to manage his successful practice until he sustained the second cerebral vascular accident in the left middle cerebral artery region at age 53.

The patient became aware of his homosexual orientation in his early teens and had several gay partners. He suffered a major depressive episode at age 26 that resolved within a few months. He also had a diagnosis of excessive harmful use of alcohol, but there was no evidence of dependence.

The patient started complaining of his changed personality and heterosexual orientation 6 months after his second stroke. At the same time he complained of excessive mood swings and changed interests. He became preoccupied with photography and had a successful photographic exhibition a year after his second stroke. His sexual orientation remained heterosexual 4 years following the second stroke, and he preferred to describe himself as bisexual because of his previous homosexual orientation.

Discussion

The mechanism by which a person acquires his sexual orientation is complex and ranges from pure psychological theories to more complex biological concepts. Our patient was aware of his homosexual orientation beginning in his early teens. He always enjoyed his gay relationships and had had at some point a live-in partner. He grew up with an absent father and had a strong bond with his mother. He went back to live with his mother after separating from his partner 4 years before his first stroke. It is unlikely that his psychological reaction to his first and/or second stroke could explain his altered sexual orientation, and his sexuality was accepted by his social network and family members.

Taking into consideration the interval between his first and second stroke, it is likely that an organic process within the left middle cerebral artery region is the cause of his altered sexual orientation.

The sexual needs of patients suffering from a brain injury are centered on hyper- and hyposexuality rather than altered sexual orientation. The alteration of sexual orientation raises serious challenges to patients and their care. It may be essential to address the issue of sexual orientation in assessing patient needs following brain injury in addition to other possible behavioral changes that might be encountered.

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Capgras Syndrome Associated With Fahr's Disease

To the Editor: Capgras syndrome is a specific misidentification syndrome in which the person believes that another person, with whom he or she has close emotional ties as well as ambivalence at the same time, has been replaced by an persecutory imposter. Capgras syndrome has been found in a number of neuropsychiatric conditions like Alzheimer's disease, parkinsonism, vascular dementia, stroke, multiple sclerosis, and schizophrenia-like-psychosis.[1] Fahr's disease is a clinical entity with idiopathic bilateral basal ganglia calcification in the absence of any clinical or biochemical abnormality. Up to 50% of idiopathic bilateral basal ganglia calcification present with neuropsychiatric manifestations, which include auditory and visual hallucinations, complex delusions, and schizophrenia-like psychosis.[2] We describe an association between idiopathic bilateral basal ganglia calcification and Capgras syndrome, which has not been reported earlier.