Supplementary Online Content


eAppendix 1. Clinical interview.
eAppendix 2. Neurobehavioral evaluation.
eFigure. DTI findings.

This supplementary material has been provided by the authors to give readers additional information about their work.
eAppendix 1. Clinical interview.

1. The clinical interview included an assessment of the presence and severity of difficulties with focusing attention or concentrating, continually paying attention to complete a job/task, stuttering, expressing or communicating ideas clearly, word finding, naming objects, coming up with the names of people, understanding what is heard or read, reading aloud, handwriting, ability to learn new things, memory for people’s names or faces, memory for facts (grocery lists, telephone numbers, appointments, news, daily events), when things happened, things that happened years ago, recognizing objects, volitional movements of hands and feet, sense of direction, calculations, organizing ideas, planning, shifting attention, decision making, judgment, slowed thinking, headaches, dizziness, nausea, vomiting, fainting spells, seizures, sleep disruption, fatigue, blurred vision, double vision, falling, balance problems.
eAppendix 2. Neurobehavioral evaluation.

2. The neurobehavioral evaluation included a survey of the presence and severity of symptoms including personality changes (apathy, impulse control, lack of inhibition, emotional lability, etc), visual and auditory hallucinations, paranoid ideation, delusions, emotional outbursts, uncontrollable feelings or emotions, aggressive behavior, depressed mood, mood swings, lack of self worth, recent stressful life events, desperation concerning the future, inability to make decisions, excessive guilt, suicidal thoughts or actions, lack of drive, inability to initiate things, significant change in energy level, change in weight, change in sleep, change in sex drive, anxiety, excessive worry, panic attacks, pressure to speak, racing thoughts, uncontrollable thoughts, recurring thoughts or ideas, or unusual fears or phobias.
eFigure. Diffusion tensor imaging (DTI) findings. DTI voxel-wise comparison of fractional anisotropy (FA) differences between symptomatic athletes with cognitive impairment and/or depression (n = 14) and asymptomatic athletes with neither cognitive impairment nor depression (n = 12). Red indicates voxels in which FA is lower in the symptomatic compared to asymptomatic retired athletes. Axial images are in radiologic orientation with the results thickened for better visibility using the tract-based spatial statistics “fill” script.