

Oishee Ghosh
McMaster LIVELab
February 21, 2021

Article Summary - Jazz, Guitar, and Neurosurgery: The Pat Martino Case Report

Objective: This article discusses the case, including treatment and results, of a professional jazz guitarist with temporal lobe epilepsy secondary to an arteriovenous cerebral malformation.

Summary: The paper discusses the history of the patient, who underwent a left temporal lobectomy in 1980, after which presented with severe retrograde amnesia and loss of ability/interest in musical activities. However, over time the patient recovered his musical abilities, eventually matching his previous level of performance. A 2007 study of his medical history and musical abilities were conducted. Specifically, the MRI (Magnetic Resonance Imaging) findings showed that much of the previously reported damage in various parts of the brain, leaving behind voids and gaps, had been filled or repaired. Additionally, the Neuropsychology Report showed that the patient performed better than expected on various cognitive tests. As such, this case study represented the first clinical observation of a patient who demonstrated complete recovery from amnesia, and regained his previous level of musicality. The article introduces the idea that the “symmetry” between hemispheres gained as a result of his musical training may have positively influenced the patient’s recovery and further musical development. To conclude, the paper hopes to further the understanding of the interrelationships of brain plasticity in terms of musical processing and memory.

Citation: Galarza M, Isaac C, Pellicer O, Mayes A, Broks P, Montaldi D, Denby C, Simeone F. Jazz, guitar, and neurosurgery: the Pat Martino case report. *World Neurosurg.* 2014 Mar-Apr;81(3-4):651.e1-7. doi: 10.1016/j.wneu.2013.09.042. Epub 2013 Sep 25. PMID: 24076057.