Fibromyalgia syndrome and cognitive dysfunction in elderly: a case series.

Nishioka K¹, Hayashi T¹, Suzuki M², Li Y¹, Nakayama S¹, Matsushima T¹, Usui C³, Shibata N³, Motoi Y¹, Tanaka R¹, Nishioka K⁴, Hattori N¹.

Abstract

AIM:

Fibromyalgia syndrome (FMS) is an extremely rare complication of neurocognitive disorders (NCDs). We experienced seven such cases, and we discuss their clinical manifestation and pathomechanisms.

METHODS:

Seven patients with FMS as a complication of NCD were enrolled. We used the patients' medical records to identify clinical manifestations and obtain experimental data, such as pain questionnaire scores, cognitive tests, genetics and radiological imaging of the brain.

RESULTS:

The seven patients were clinically diagnosed with frontotemporal NCD (n = 3) or Alzheimer's disease (n = 4). No patient presented with any organic disorder that would explain their chronic pain. Through their courses, they experienced refractory widespread pain continuously despite analgesics. Brain magnetic resonance imaging revealed moderate or severe atrophic changes in the temporal lobes and hippocampus. Three-dimensional stereotactic surface projection (3D-SSP) analysis of brain single photon emission computed tomography (SPECT), indicated severe hypoperfusion on the right side of the medial temporal lobe, both sides of the anterior corpus callosum, anterior cingulate gyrus, and primary sensory area. Genetic analysis uncovered no pathogenic mutations.

CONCLUSIONS:

Neurodegenerative disorders are rarely complicated by FMS, which is associated with relatively severe pain. Central sensitization may be a possible risk factor of widespread pain in elderly patients with NCD.