ECRONICON OPEN ACCESS

EC NEUROLOGY
Editorial

Magnetic Resonance Imaging of the Hippocampus during Normal Aging and in Neurodegenerative Diseases: A Post-Mortem Study

Jacques De Reuck*

Unité 1171 "Degenerative and Vascular Cognitive Diseases". Université de Lille 2, Lille, France

***Corresponding Author:** Jacques De Reuck, Unité 1171 "Degenerative and Vascular Cognitive Diseases". Université de Lille 2, Lille, France.

Received: July 30, 2021; **Published:** August 12, 2021

During normal aging only mild hippocampal atrophy occurs, comparing middle-aged persons with elderly ones. Also, the number of micro-bleeds and micro-infarcts is not significantly increased.

Atrophy of the hippocampus is considerable in Alzheimer's disease (AD) and in frontotemporal degeneration (FTLD). Micro-bleeds are only increased in FTLD. Micro-infarcts are not significantly more frequent in the hippocampus of both diseases, compared to normal controls.

In Lewy body disease, progressive supranuclear palsy and corticobasal degeneration no significant degree of atrophy of the hippocampus is observed. Also, the number of micro-infarcts and micro-bleeds is not significantly different from those in age-matched controls [1].

In amyotrophic lateral sclerosis (ALS) the hippocampal atrophy is moderately significant. This could be due to the fact that ALS is frequently linked to FTLD. The number of micro-infarcts and micro-bleeds, on the other end, is not significantly different compared to controls [2].

Although there is severe atrophy of the hippocampus in several neurodegenerative diseases the incidence of micro-infarcts and to a lesser degree of micro-bleeds is much less severe than in the cerebral neo-cortex. The hippocampus seems to have a better protection against cerebrovascular lesions than the other regions of the brain.

Bibliography

1. De Reuck J., *et al*. "Post-mortem 7.0-tesla magnetic resonance imaging of the hippocampus during normal aging and In neurodegenerative dementias". *Review of Neuroscience and Psychology* 1.2 (2020): 108-113.

2. De Reuck J., *et al*. "Post -mortem 7.0-tesla magnetic resonance imaging of the hippocampus in amyotrophic lateral sclerosis". *OBM/Geriatrics* 40.4 (2020).

Volume 13 Issue 9 September 2021