

March 04-05, 2019  
Amsterdam, NetherlandsJ Neurol Neurosci 2019, Volume:10  
DOI: 10.21767/2171-6625-C1-021

# BRAIN AND IMMUNE SYSTEM ACTIVATION: THE KURU DISEASE AN ENDOGENOUS-TOXICOLOGICAL PROCESS LIKE

**Luisetto M<sup>1</sup>, Behzad Nili-Ahmadabadi<sup>2</sup>, Ghulam Rasool Mashori<sup>3</sup>, Ahmed Yesvi<sup>4</sup>, Ram Kumar Sahu<sup>5</sup>, Heba Nasser<sup>6</sup>, Cabianca luca<sup>7</sup> and Farhan Ahmad Khan<sup>8</sup>**

<sup>1</sup>Applied Pharmacologist, Europeans Specialist Lab Medicine, Independent Researcher, Italy

<sup>2</sup>Pharm D/Phd Innovative Pharmaceutical Product Development Specialist, USA

<sup>3</sup>Peoples University of Medical and Health Sciences for Women, Pakistan

<sup>4</sup>Founder and President Yugen Research Organization (YRO) Independent Researcher Bangladesh

<sup>5</sup>Columbia Institute of Pharmacy, India

<sup>6</sup>Heliopolis University, Egypt

<sup>7</sup>Biomedical Laboratory, Italy

<sup>8</sup>Professor and Head, Department of Pharmacology, AIMSRC, India

**S**tarting from observation of pathogenesis of Kuru disease, we try to investigate the immunologic role played by central nervous systems. A deeply knowledge in the transmission model of this pathology can be an imaging/diagnostic tool to verify the progression of this prion molecule from gastro-intestinal systems to the brain (after cannibalistic behaviour). The prions can be considered a sort of trace ant in kuru to monitoring this process and immune-brain relationship. Interesting information can be obtained useful to produce new pharmacological strategies in some other degenerative brain disease involving innate immune system activation. Observing the kuru disease, we can have a model to better describe this process and its relationship. The review article was aimed to show relationship between innate immune system in some brain neurodegenerative pathology useful to produce new therapeutic strategies that could be introduced. The rationale of this paper is that in kuru disease prions in CNS produce a degenerative response related also to innate immune system response. Relationship between some brain disease as amyloidosis and other degenerative disease like Parkinson, dementia and prions disease and other must be deeply investigated especially by the innate immune system role played. Multiple sclerosis is a neuro inflammatory disease that involves adaptive immunity: Lymphocyte T and B, while other disease such as Alzheimer's, neurodegenerative pathology involves the innate immunity (microglia-macrophage like activity, first immune control system in the central nervous systems). Observing the kuru disease, the time involved in presentation of syntomatology after intake of prions and (a slow process) related to the fast time in some cases involved in some neurotropic viruses we can think to a passive (vs. active) process by which immune systems transfer to the brain the toxic prions from GI system.

[auro65@gmail.com](mailto:auro65@gmail.com)