

## Inflammation and oxidative stress in transgenic app/preseniline 1 mice and in neural primary culture cells

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The use of transgenic mice to elucidate Alzheimer's disease has been development in the last decade. Here we use APP/ Preseniline 1 transgenic mice to analyze inflammation and oxidative stress in transgenic mice compared with wild type. Microarray from inflammation proteins, Western-blot and RT-PCR are used to compare wild type and transgenic mice. Increase in pro-inflammatory proteins and decrease in anti-inflammatory proteins were detected in transgenic compared with wild type. Also, using western-blot assay we detect an increase of NMDA R1 and a decrease of NMDA R2 in transgenic mice compared with wild type in hippocampus, limbic and cerebellum. In conclusion, an unbalance between inflammatory and anti-inflammatory proteins and also different regions in brain use different pathways to protect viability of cell brain against the toxicity in Alzheimer's disease.

### Biography

Soraya L. Valles has completed her graduation in 1990 in biological science at the University of Valencia and had Ph.D. under supervision of Consuelo Guerri, until 1996. Dissertation was "Changes of astroglia intermediate filaments gene expression during rat brain development: Effect of alcohol exposure". 1997 she won pre-doctoral award, school of medicine, University of Valencia. In 1997 she joined Eva Qwanstrom's group at the Hallamshire Hospital, University of Sheffield, UK in interleukin-1 (IL-1) receptor complex. In 2000 returned to Spain at Department of Physiology, school of medicine, University of Valencia as lecturer, working in Alzheimer's disease with Jose Vina's group. Actually is independent laboratory director, studding Alzheimer's diseases, inflammation and oxidative stress. She has about 25 international papers been referee of many health international journals.

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