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&

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## Soraya L Valles

University of Valencia, Spain

### Chemokines and chemokines's receptors in APP/PS1 mice

The amyloid precursor protein plus presenilin-1 (APP/PS1) mice are a frequently-used model for Alzheimer's disease studies (AD). Using behavioral studies, quantitative RT-PCR and Western-blot techniques, significant findings were determined by the expression of proteins involved in inflammation comparing APP/PS1 and Wild type mice. Increased GFAP expression could be associated with the elevation in number of reactive astrocytes. IL-3 is involved in inflammation and ABDF1 intervenes normally in the transport across cell membranes and both were found up-regulated in APP/PS1 mice compared to Wild type mice. We noted for the first time, a CCR8 increase expression with diminution of its CCL1 chemokine, both normally involved in protection from bacterial infection and demyelination. Furthermore, CCR5 expression was decreased and both CCL3 and CCL4 chemokines were highly expressed indicating a possible gliosis and probably an increase in chemotaxis from lymphocytes and T cell generation. Inflammation in AD will be the next step in the therapeutic approach.

#### Biography

In 1985, Soraya L Valles graduated in Biological Science at the University of Valencia and in 1996 she finished her PhD in the IIC Institute looking for astrogliongenesis during brain development. In 1997 she spent three years at Hallamshire Hospital, Sheffield, UK. She was working in inflammation and regulation of IL-1 and IL-1 receptor. In 2000 She returned to Spain at Department of Physiology, Faculty of Medicine in University of Valencia until now. She is working in toxicity in developmental and neurodegenerative disease (such as Alzheimer's disease) looking for oxidative stress and inflammation mechanisms

[lilian.soraya.valles.com](mailto:lilian.soraya.valles.com)