

**SPORADIC AMYOTROPHIC LATERAL SCLEROSIS:
BRIEF PATHOGENIC REVIEW AND A NEW CAUSAL HYPOTHESIS**

Roberto E.P. Sica

*Instituto de Investigaciones Cardiológicas, División Neurología (ININCA),
School of Medicine, Buenos Aires University, Argentina*

Abstract:

This article summarizes the pathogenic mechanisms known to be responsible for sporadic amyotrophic lateral sclerosis, such as excitotoxicity, endoplasmic reticulum stress, oxidative stress, proteins damage, inflammation, genes abnormalities and neuronal death; some clinical features of the disorder are discussed as well. Finally, it puts forward the hypothesis that astrocytes, rather than the motor neurons, may be the cells initially damaged by the action of a still unknown causal agent, being the neuronal death a consequence of that first insult. The article suggests that an emergent virus, perhaps a retro-virus, or a misfolded infectious protein might be the agent able to accomplish the task.

Keywords: amyotrophic lateral sclerosis, sporadic amyotrophic lateral sclerosis, SALS cause, SALS pathogenesis, motoneurons related astrocytes, motor neuron diseases