Synaptotagmin-1 overexpression under inflammatory conditions affects secretion in salivary glands from Sjögren's syndrome patients

Cortés, Juan

Hidalgo, Jorge

Aguilera, Sergio

Castro, Isabel

Brito, Mónica

Urra, Hery

Pérez, Paola

Barrera, María José

Carvajal, Patricia

Urzúa, Ulises

González, Sergio

Molina, Claudio

Bahamondes, Verónica

Hermoso, Marcela

González, María Julieta

Sjögren's syndrome (SS) is an autoimmune exocrinopathy associated with severe secretory alterations by disruption of the glandular architecture integrity, which is fundamental for a correct function and localization of the secretory machinery. Syt-1, PI(4,5)P 2 and Ca 2+ are significant factors controlling exocytosis in different secretory cells, the Ca 2+ role being the most studied. Salivary acinar cells from SS-patients show a defective agonist-regulated intracellular Ca 2+ release together with a decreased IP3R expression level, and this condition may explain a reduced water release. However, there are not reports where Syt-1, PI(4,5)P 2 and Ca 2+ in acinar cells of SS patients had been studied. In the present study, we analyzed the expression and/or localization of Syt-1 and PI(4,5)P 2 in acinar cells of labial salivary gland biopsies from SS-patients and control

individuals. Also, we evaluated whether the overexpression of Syt-1 and the loss of cell polarity i