Serotype a of Aggregatibacter actinomycetemcomitans down-regulates the increased serotype b-induced cytokine and chemokine production in dendritic cells

Rojas, Leticia

Melgar-Rodríguez, Samanta

Díaz-Zúñiga, Jaime

Alvarez, Carla

Monasterio, Gustavo

Rojas, Carolina

Carvajal, Paola

Vernal, Rolando

© 2018 Elsevier Ltd Objective: In Aggregatibacter actinomycetemcomitans, different serotypes have been described based on LPS antigenicity. Mixed infection with the different A. actinomycetemcomitans serotypes is frequent in periodontitis patients; accordingly, the role of this bacterial species in the pathogenesis of periodontitis may differ depending whether patients or periodontal lesions harbour one or more of the A. actinomycetemcomitans serotypes. We hypothesized that different combinations of these serotypes could be associated with distinct host responses and hence different inflammatory patterns. This investigation was aimed to assess whether the increased immuno-stimulatory potential attributed to the serotype b of A. actinomycetemcomitans on immune cells is able to be modified during co-infection with other A. actinomycetemcomitans serotypes. Methods: Dendritic cells (DCs) were obtained from healthy subjects and stimulated with the different A. actinomycetemcomitans serotype