The IL-17/Th17 Axis as a Therapeutic Target in Periodontitis

Abstract

The Th17/IL-17 axis has been implicated in the pathogenesis of several inflammatory and autoimmune diseases including psoriasis, rheumatoid arthritis, and periodontitis. Indeed, in periodontitis, recent studies have further highlighted the role of the Th17/IL-17 axis in mediating immunopathology underscoring this pathway as a plausible therapeutic target for this disease. In this chapter, we focused not only on the role of IL-17A during immunopathology but also on its protective roles at mucosal barrier sites. We discussed the role of Th17 cells and IL-17A in oral mucosa homeostasis, their regulation and role in periodontal immunopathology. Finally, we reviewed the currently used agents for the management of Th17/IL-17 mediated diseases and commented on their possible use in the treatment of periodontitis.

Keywords

Th17  IL-17  Periodontitis  Immunopathology  Inflammation  Therapy  Target  Oral Mucosa  Gingiva