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Abstract

Reliability of Biomedical Devices and Technologies.

Mauricio Goncalves da Costa Sousa
Universidade Catolica de Brasilia, Brazil.

Abstract:

Due to the complexity of different pulp tissue infections, new anti-infective nanotechnological approaches have been emerging for endodontics in recent years. These strategies may contribute to antimicrobial molecules delivery, tissue regeneration, and oral health maintenance by acting in a more specific site and not being cytotoxic. In this context, nanofibers and nanoparticles appear as versatile structures and might act both in the release of antimicrobial molecules and as a scaffold for new tissue formation. This way, this presentation will review the application of different nanostructures as new strategies for the delivery of antimicrobial molecules for endodontics. Furthermore, it will be discussed the main polymers used to construct nanostructures for endodontics, methods of production and mainly their antimicrobial activity against microorganisms commonly responsible for the usual pulp infections.

Biography:

Mauricio Sousa (DDS, MSC) is a phd candidate in Biotechnology (Universidade Catolica de Brasilia) and has been working with diffent aproaches to infecction control in endodontics. He has done international interships on the University of British Columbia - Vancouver and The University of Texas – Houston.

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