

Dr Stéphane Simon
Institution; Univ. of Paris, France.

Title; Studying the Msx1 homeogene box expression in the pulp healing process after capping with Mineral Trioxide Aggregate.

Abstract:

Despite many studies, the understanding of molecular determinants in the differentiation of the pulp cells during the processes of reparative dentinogenesis still requires in vivo experimentation. The cognitive objective of this work is to study nuclear proteins, the transcription factors Msx1 and Msx2, as factors permitting to identify the exact origin of the replacement cells and their differentiation. The project purpose is to establish a protocol for studying the reparative dentinogenesis after pulp capping with MTA on transgenic mice in Msx1 +/- and Msx2 +/- . The heterozygous animals allow following the expression of Msx1 by histoenzymology of the β galactosidase. The aim of this study is to evaluate the expression of homeobox genes Msx1 and Msx2 in the pulp tissue during reparative dentinogenesis in response to a direct pulp capping with Mineral Trioxide Aggregate.