

ROBUSTA COFFEE BEANS DECREASE OF INFLAMMATION IN DENTAL CARIES

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Abstract

Introduction. Robusta coffee bioactive component such as flavonoids, xanthine can serve as anti-inflammatory, antibacterial. It is expected can provide solutions as an immunomodulator to dental caries. Currently immunomodulatory become an important topic in the world to prevent and treat disease. Inflammation is one of the immune response is important in dental caries. whereas one of dental caries therapy is pulp capping. **Aim.** analyze the inflammatory response Robusta coffee beans to dental caries. **Method.** which are divided into 5 groups. KO: the group made a hole in the tooth, KP1; the group made a hole in the tooth + pulpcaping Ca(OH)₂, KP2: a hole in the tooth + pulpcapping with coffee bean paste fillings 25%, KP3: a hole in the tooth + pulpcapping with coffee bean paste fillings 50%, KP4: a hole in the tooth + pulpcapping with coffee bean paste fillings 75%. Days to 7, 14, 21 made the rats were sacrificed for the preparation of the pulp for analysis of inflammatory cells with HE staining. **Result.** ANOVA followed LSD test results showed significant differences between groups. Noticeably higher concentration of robusta coffee beans, then progressively decrease the number of inflammatory cells. **Conclusion.** Robusta coffee beans decrease inflammation in dental caries.

Keywords : Inflammation ; dental caries ; immunomodulatory ; coffee beans