Retrospective Study of Pulpectomy with Vitapex® and LSTR with Three Antibiotics Combination (3Mix) for Non-Vital Pulp Treatment in Primary Teeth*

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ABSTRACT

Pulpectomy with Vitapex® and Lesion Sterilization and Tissue Repair Therapy (LSTR) with 3Mix MP are treatment options for non-vital pulp treatment in primary teeth. The outcomes of both treatments have been reported, but with limited follow-up periods. Moreover, the factors relevant to their success have yet to be determined.

The aim of this research was to evaluate the success of non-vital pulp treatments with Vitapex® pulpectomy and LSTR with 3Mix MP in different follow-up periods and to determine the factors that influence success of the treatment. This was a retrospective study of 73 teeth that had non-vital pulp treatment, either with Vitapex® or 3Mix MP, in healthy children, aged 3-10 years, at the Pediatric Dentistry Clinic, Chiang Mai University, Thailand. The records included clinical and radiographic examinations at follow-up periods ranging from 6-72 months. Success rates of both groups and the various factors that may influence success were determined by descriptive analysis.

Including all follow-up periods (from 6 to 72 months), the average success rates of the Vitapex® group determined by clinical and radiographic evaluations were 89.0% and 64.6%, respectively. The success rates of the 3Mix MP group determined by clinical and radiographic evaluations were 84.6% and 65.2%, respectively. The influences of various permanent restorations and the time elapsed between the temporary and permanent restorations were found to influence the success of non-vital pulp treatment in primary teeth. Both pulpectomy with Vitapex® and LSTR with 3Mix MP were acceptable treatment options of non-vital pulp treatment in primary teeth.

Keywords: Vitapex®, 3Mix MP, Non-vital pulp treatment, Primary teeth

INTRODUCTION

Maintenance of primary dentition is imperative for the development of arch form, esthetics, function, mastication and normal eruption of permanent

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