شبكة المعلومات الجامعية

بسم اللّه الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

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بالرسالة صفحات
لم ترد بالأصل

Comparing the Antibacterial Effect of *Psidium guajava* Extract, *Camellia sinensis* Extract and Chlorhexidine gluconate as Root Canal Irrigants in Primary Teeth: In-Vitro Study

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Dedication

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List of Abbreviations

Abbreviation	Term
CHX	*Chlorhexidine*
P. guajava	*Psidium guajava*
E. faecalis	*Enterococcus faecalis*
P. gingivalis	*Porphyromonas gingivalis*
E. coli	*Escherichia coli*
S. mutans	*Streptococcus mutans*
S. aureus	*Staphylococcus aureus*
C. albicans	*Candida albicans*
NaOCl	*Sodium hypochlorite*
St. aureus	*Streptococcus aureus*
H. influenzae	*Haemophilus influenzae*
P. aeruginosa	*Pseudomonas aeruginosa*
A. actinomycetemcomcomitans	*Aggregatibacter actinomycetemcomitans*
EGCG	*Epigallocatechin gallate*
GC	*Gallo-catechin*
CFU	*Colony forming units*
BHI	*Brain Heart Infusion*
BHIA	*Brain Heart Infusion agar*
PCR	*Polymerase Chain reaction*
PSI	*Pounds per square inch*
RPM	*Revolutions per minute*
SD	*Standard deviation*
ml	*Milliliters*
EDTA	*Ethylenediaminetetraacetic acid*
DNA	*Deoxyribonucleic acid*

Introduction

The early loss of primary teeth can compromise the development of permanent dentition and lead to psychological and behavioral problems. [1]

Successful root canal therapy depends on the combination of proper mechanical instrumentation, disinfection and obturation. Of these three essential steps, irrigation of the root canal is the most important in the process of healing. Irrigation results in flushing out of debris, dissolving tissue, and disinfecting the root canal system. [2]

Chlorhexidine gluconate is proved to be an acceptably biocompatible antimicrobial irrigant. [3,4,5] However, discoloration of teeth, precipitation of calculus, loss of taste, dryness of the oral cavity and irritation of the oral mucosa limit its use. To counter the ineffectiveness, potential side effects and safety concerns of synthetic irrigants, herbal alternatives have been introduced. Herbal irrigants are easily available and cost-effective. They have long shelf life and low toxicity and lack microbial resistance. [6]

Extracts from *Psidium guajava* species showed significant inhibitory effects against *Enterococcus faecalis*; one of the most