The Effect of Two Natural Irrigations on Canal Cleanliness and Dentine Microhardness (In-Vitro Study)

This Thesis Submitted Faculty Of Dentistry, Ain Shams University For Partial Fulfillment Of Requirements For The Master Degree In Endodontic

By
Shaimaa Fathy Abd Elaziz
B.D.S Faculty of Dentistry
Ain Shams University (2009)

Faculty of Dentistry
Ain Shams University
2021

Supervisors

Prof. Dr. Abeer A.Elhakim El Gendy

Professor of Endodontics

Faculty of Dentistry

Ain Shams University

Dr. Mohamed Mokhtar Nagy

Associate Professor of Endodontics

Faculty of Dentistry

Ain Shams University

Faculty of Dentistry
Ain Shams University
2021

سورة البقرة الآية: ٣٢

Acknowledgement

First and foremost, I feel always indebted to **ALLAH**, the most Kind and Most Merciful.

I express my deepest gratitude to ***Prof. Dr. Abeer El Gendy,*** Professor of Endodontics, Faculty of Dentistry, Ain Shams University for his constant guidance, support, motivation and untiring help during this work, her depth knowledge has been extremely beneficial for me.

I express my profound sense of respect to my supervisor ***Dr. Mohamed Mokhtar Nagy,*** Associate professor of Endodontics, Faculty of Dentistry Ain Shams University, for the time, support, motivation, and guidance, he devoted to me. His high moral ethics was a model for me.

Shaimaa Fathy

Dedication

I would like to dedicate this thesis to my whole family, without their sincere support, prayers and pushing me forward, this work wouldn’t have ever completed. They have been there for me my whole life and I will never find adequate words to express my gratitude.

Special thanks deeply from my heart to my parents, husband and my kids (Adam &Malek) for being my backbone and for their continues support and effort through this work.

I also dedicate this thesis to my friends who have supported me and being there throughout the process.

Finally, great thanks for my big family for their kind affection and encouragement.

Thank you from all my heart

List of Contents

List of Tables

List of Figures