



بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / حسام الدين محمد مغربي

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى

مسئولية عن محتوى هذه الرسالة.

ملاحظات : لا يوجد





# “Clinical and CBCT Evaluation of the Quality of Obturation and Time Efficiency of Rotary Versus Manual Instrumentation in Pediatric Endodontics”

Thesis

Submitted In Partial Fulfillment of the Requirements of  
the Doctorate Degree in Pediatric Dentistry and Dental  
Public Health

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يَرْفَعُ اللَّهُ الَّذِينَ آمَنُوا  
مِنْكُمْ وَالَّذِينَ أُوتُوا  
الْعِلْمَ دَرَجَاتٍ

(سورة المجادلة - آية 11 )

## *Dedicated to*

*The soul of my father,*

*Whose affection encouraged me throughout my whole life. Hopefully I am making him proud by fulfilling his dream and will.*

*My mother*

*My role model for strength and dedication. Her constant, unconditional love and support, I became the person I am today.*

*My brother*

*who continued to support me through words and actions. I value all your input and appreciate your confidence.*

*My beautiful niece*

*for the joy, she brings to my life.*

# *Acknowledgement*

All praise and all thanks to Allah, who has given me the strength, guided me, and enabled me to accomplish this work.

The completion of this thesis would not have been possible without the support and encouragement of several special people. Hence, I would like to take this opportunity to show my deepest gratitude to those who have assisted me in a myriad of ways.

First, I would first like to express my heartfelt thanks and my deepest gratitude to my supervisors: ***Professor Dr. Noha Samir Kabil***, for sharing her expertise, continuous motivation, support, sincere and valuable guidance. Respectful thanks to ***Dr. Mariem Osama Wassel*** for her willingness to offer me so much of her time, her guidance and dedication for the thesis to stand out at its best.

Furthermore, my deepest appreciation to ***Proferssor Dr. Nadia Metwalli*** for her continuous support and encouragement. Much obliged, ***Dr. Shaimaa Abu El Sadat***, Lecturer of Dental Radiology, Ain Shams University, ***Dr. Mahmoud El Sayed***, MSc. Dental Radiology, Ain Shams University whom assisted in and facilitated the process of CBCT scanning and interpretation and ***Dr. Wael elshater***, Lecturer of Endodontics, Ain Shams University, who never spared his time or knowledge whenever needed.

This acknowledgement would be incomplete without expressing my endless gratitude to all my friends and colleagues in the Pediatric Dentistry Department, Ain Shams University and the British University in Egypt. Moreover my beloved patients who put up with me through this tough journey.

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## **Table of Abbreviations**

Symbol	Meaning
AAPD	American Academy of Pediatric Dentistry
B-L	Buccolingual
BMP	Behavior management problems
Ca(OH) <sub>2</sub>	Calcium Hydroxide
CBCT	Cone Beam Computed Tomography
CEJ	Cemento-enamel junction
CHX	Chlorhexidine gluconate
CM	Controlled memory
DIOR	Digital intra-oral receptor
dmft	decayed, missing, filled primary teeth
DPC	Direct pulp capping
ECC	Early childhood caries
FOV	Field of View
GIC	Glass Ionomer Cement
H <sub>2</sub> O <sub>2</sub>	Hydrogen Peroxide
IMD	Innovative Material and Devices Inc.
IPC	Indirect pulp capping
IRM	Intermediate Restorative material