

بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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بالرسالة صفحات

لم ترد بالأصل



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EVALUATION OF THE SEALING ABILITY OF
GLASS IONOMER AND ZINC OXIDE - BASED
SEALERS USING LATERAL CONDENSATION AND
SINGLE CONE TECHNIQUES

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THESIS

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INTRODUCTION

INTRODUCTION

Endodontic treatment of permanent teeth is a familiar restorative procedure in pediatric dentistry, especially in young age patients whom are subjected to traumatic injuries and required for one or more reasons root canal therapy (Nicholas and David 1977 & Symons 1986).

Success of endodontic treatment is based mainly on the proper chemomechanical debridement and hermetic sealing of the entire root canal system with dense and biologically accepted filling material (Ingle 1985 & Dalat and Spangberg 1994).

Inadequate apical sealing of root canal, would allow percolation of water soluble proteins, enzymes and minerals from blood serum and the surrounding tissue fluid into the apical foramen area. Stagnation of such fluid materials near the root apices would stimulate inflammatory reactions in the surrounding periapical tissues and resulted in failure of endodontic treatment (Dow and Ingle 1955 & Stenman and Spangberg 1990).

Several root canal obturation techniques have been introduced in the dental literatures. The basic lateral condensation technique has been proved to be the most popular and clinically accepted one. Vertical condensation, thermomechanical, single cone, chemically softened gutta percha and injectable thermoplasticized gutta percha techniques were also developed and tested extensively in the comparative studies for their varying degree of success and clinical acceptance (Zakariasen and Staden 1982, Harris et al. 1982 & Michanowicz and Czonstkowsky 1986).