سامية محمد مصطفى

شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

سامية محمد مصطفى

شبكة المعلومات الجامعية

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التوثيق الالكتروني والميكروفيلم

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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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شبكة المعلومات الجامعية

بالرسالة صفحات لم ترد بالأصل

EVALUATION OF THE CHANGES IN THE SUPPORTING TISSUES UNDER THERMOPLASTIC DENTURE BASE LINER

Thesis
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PROSTHODONTICS

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INTRODUCTION

INTRODUCTION

The residual ridge is primarily composed of unique oral soft tissue and alveolar bone.[1] Wearing of a denture apparently alters the structure of the ridge mucosa from orthokeratinized to parakeratinized and a reduction in the thickness of the stratum corneum occurs.[2]

The influence of denture base on ridge resorption is controversial. Some authors believed that wearing dentures reduced alveolar bone resorption.[3,4,5] Others believed that wearing dentures may induce the resorption process. [6,7,8] However, clinical reports have implied that a well-fitting dentures preserve alveolar bone, [9] but longitudinal studies question this belief. [10]

The rate of residual ridge reduction (RRR) is different among persons, and even at different sites in the same person. Residual ridge remodeling directly affects the function of removable prostheses, which rely greatly on the quantity and architecture of the jaw bone. [11]

The nature of denture base has been elucidated as one of the prosthetic factors that influence the rate of residual ridge resorption as well as the mucosal surface in contacts and the underlying bone. [9]

Resilient denture liners are used for patients who cannot tolerate a conventional hard denture base, thin non resilient mucosal coverage, poor ridge morphology and persistent denture sore mouth. [12,13]

A variety of materials has been proposed for denture relining including natural and synthetic rubbers, acrylic polymers and acrylic copolymers, polyvinyl chloride resins, silicone resins and others. [14]

None of these materials has proven to be entirely satisfactory to date. Clinical failure has been found in varying degree with all materials. They develop a rough surface after wear, split under stresses, change in color with loss of plasticity and support growth of yeasts and other organisms. [15,16]

Recently thermoplastic elastic (Rubber like) material has been described as a denture base liner [17,18]. It exhibited advantages over all resilient soft-liners and its behavior of compression is very comparable to the elastic nature of the oral mucosa. [19]

Although this material seems to be permanent, no data are available regarding its effect on the mucosal and alveolar ridge preservation.

REVIEW OF LITERATURE

REVIEW OF LITERATURE

Resilient Denture Liners

Soft lining materials may be defined as soft polymers which may be applied to the fitting surface of a denture for the purpose of reducing and more evenly distributing the occlusal loading on the underlying mucosal tissue. [20]

Classification of Soft Lining Materials

Parker [21] classified soft denture liners into two basic types:

1-Temporary soft-liner: as tissue conditioner.

2-Permanent Soft-liner: which could be subdivided into:

- Mouth-processed resilient liners which are supplied in the form of powders and liquids and utilized in the same manner as tissue conditioners but they are not soft as tissue conditioners.
- Laboratory-processed resilient liners: which will be further subgrouped according to their chemical composition into:

-Natural rubber liner
-Vinyl-copolymer liner
-Hydrophilic liner
-Silicone soft liner
-Acrylic soft liner

Wright [22] classified the soft lining materials into two main groups:

- Temporary soft lining materials (Tissue conditions).
- Permanent soft lining materials which are classified according to their composition into:

- Heat-activated silicone rubber materials.
- Self-activated silicone rubber materials.
- Heat-activated soft acrylic materials.
- Polyphosphazine fluoroelastomer material.
- Polyurethane material.