

Salwa Ak1



بسم الله الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني



Salwa Ak1



جامعة عين شمس

التوثيق الإلكتروني والميكرو فيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

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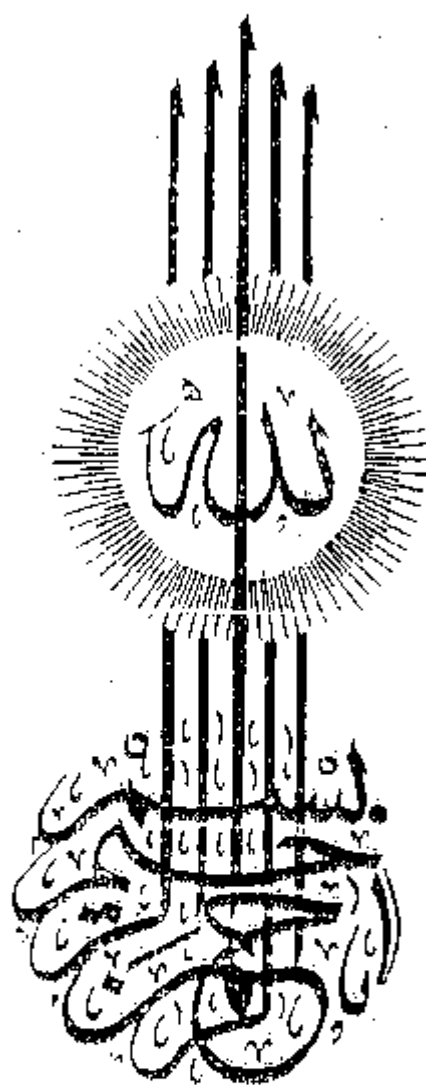


Salwa Akl



بعض الوثائق الأصلية تالفة
وبالرسالة صفحات لم ترد بالأصل





سُبْحَانَكَ اللَّهُمَّ لَنَا إِلَهًا وَنَسْتَغِيثُكَ
إِنَّا نَسْتَعِظُكَ بِالْعِلْمِ وَالْقُدْرَةِ

مَدِينَةُ الْمَدِينَةِ
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**CLINICAL AND HISTOPATHOLOGICAL EVALUATION OF
THE CURATIVE ROLE OF CARBON DIOXIDE LASER IN THE
TREATMENT OF ORAL LICHEN PLANUS
(RETICULAR FORM).**

THESIS

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BY

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Dedicated To

- *The Sole of my mother*
- *My Father*
- *My Wife*
- *and my children*

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INTRODUCTION

Introduction

Light has been used as a therapeutic agent for various pathological conditions since many centuries. The light Amplification stimulated Emission of Radiation "LASER" is the recent development for Microwave Amplified Stimulated Emission of Radiation which was acronimated as "MASER". The recent technology of laser have greatly influenced many aspects of life in war & piece. Lasers can kill, cure & be as an entertainment. (*Almas K. 1994*).

According to lasers wave length & tissue interaction lasers are classified into soft & hard lasers (*Pick et al., 1989*). Soft lasers are a source of cold (Athermic) energy emitted as wave length thought by some practitioners to stimulate cellular activity. Hard lasers are transmitted at high energy levels & frequencies. They can ablate tissues due to its photothermal effect through vaporization & superheating of tissue fluids. At present, three popular types of hard lasers are commonly used in medical field, Argon, Neodymium-doped Yttrium Aluminum Garnet (Nd: YAG) & carbon dioxide lasers (CO₂) (*Almas K. 1994*).

CO₂ lasers was firstly developed by *Patel et al., 1964*. It depends in origin on a gas, (CO₂); with a wave length (10.6 μ m); fall in the far infrared range of the spectrum. Although CO₂ laser have an affinity for wet tissues regardless of tissue color, its penetration depth is only 0.2 to 0.3 mm. CO₂ laser was recently tried in the management of many tissue lesions such as tongue lesions, aphthous ulcers, herpetic lesions and in white lesions such as lichen planus (*Pick & Colvard 1993*). In malignant tumors

Co₂ laser was tried in either the excisional or incisional biopsies. (*Chiesa et al, 1990*).

Early 80's showed wide use of laser in clinical dental practice specially in the management of white lesions including lichen planus with conflicting results (*Horch et al, 1984, Frame et al, 1984 & Others*). Therefore the rational in the present study was to evaluate the role of Co₂ laser in the management of oral lichen planus.

Lichen planus is a pruritic skin disease affecting oral mucosa predominantly in the middle age *voute*(1992). Many different predisposing factors may influence the etiology of Lichen planus, but the exact cause is still unknown that is why uptill now no definitive method for treatment could be determined (*Burkhart 1996*). Some physicians have used vit. A; levamisole and Criseofulvin with hectic success rate (*Rees, 1989*). The most commonly used method for treatment is by using corticosteroid therapy either topical, systemic or both, but it has shown noticeable recurrence rate (*LOH 1992*).

REVIEW OF LITERATURE

Review of Literature's

Lichen Planus

Definition:

Lichen planus is a mucocutaneous disease of unknown etiology. The disease may affect skin alone, but oral involvement had been extensively reported in nearly about 50% of patients (*Woo, 1985*).

Historical review:

Wilson (1869) was the first to describe patients who had lichen planus. The investigator described 50 patients with the majority being female. They were anxious, high strung, over conscious and sensitive with tendency to worry excessively. *Samman (1961)* stated that skin lesions were relatively constant appearing as flat violaceous papules with fine scaling on the surface. They revealed spontaneous resolution of nearly 89% within 2 years leaving some melasmic staining. Relapse occurred in only 20% of patients. Alopecia occurred in some patients. It might be termed Lichen planus planopilaris (Graham Little Syndrome); 10% of patients who were suffering from this syndrome complained of nail changes particularly longitudinal ridging and grooving. Cutaneous lesions were more prevalent on the extremities with predilection for flexor surface. They were generally transient.

Classical forms of oral lichen planus (L. P.), are white papules on buccal & lingual mucosa, firstly recognized by *Thibierge (1885)* and *Wilson (1869)*. In contrast to skin lesion, oral lesions often persist & remain symptomatic for years. Oral or cutaneous lesions often develop between the ages of 40 & 70 years. Most studies indicated a slight to

significant female predilection. In men, the disease tends to occur at some what younger age (*Simpson, 1957*).

Oral lesions of LP appeared to be more pleomorphic than those of cutaneous LP. Up to 6 clinical patterns have been described; with several forms might be presented in the same patient. Reticular LP was the most common type. It consisted of slightly raised fine whitish lines in an inter locking lace like pattern "wikhams straia" or in an annular arrangement. (*Scully & ElKom 1958*). Papular form measuring 0.5 to 1mm appeared as elevated whitish papules on the well keratinized areas of oral mucosa. Plaque lesions was often difficult to be distinguished from leukoplakia. Bullous LP was rare; only 5 cases out of 197 patients with cutaneous LP were reported (*Altman & Perry 1961*).

Atrophic LP. was described as inflamed areas of the oral mucosa covered by thin, red epithelium. Atrophic LP. involving gingivae often referred to as desquamative gingivitis which is a descriptive term used for bright red edematous patches involving the full width of the affected gingivae which must be indistingusihed histopathologically from similar lesions occurring in some patients with mucous membrane pemphigoid & pemphigus (*Regazi 1989*). *LOH (1992)* stated that Erosive lesions probably developed as a complication of either atrophic when the thin epithelium was abraded or ulcerated or from rupture of bullous lesions. Also it might develop de novo. In general atrophic, erosive & bullous forms were generally associated with pain while reticular, papular & plaque like lesions are generally asymptomatic. The common sites for the lesion were cheeks, tongue & less frequently lips, gingivae, floor of mouth & palate. Oral lesions mostly appear bilateral