

سامية محمد مصطفى



شبكة المعلومات الجامعية

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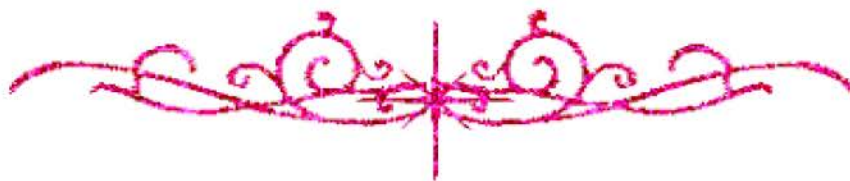
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شبكة المعلومات الجامعية



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





سامية محمد مصطفى



شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

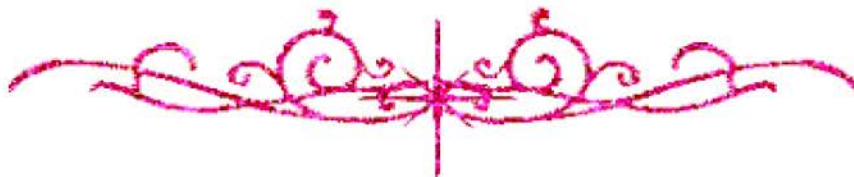
## قسم

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



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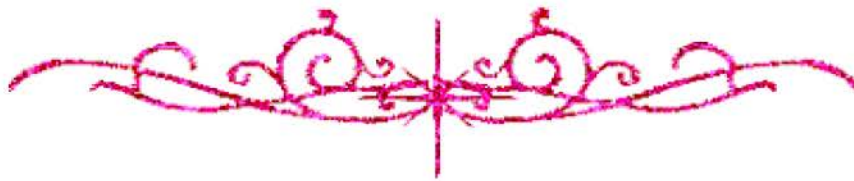
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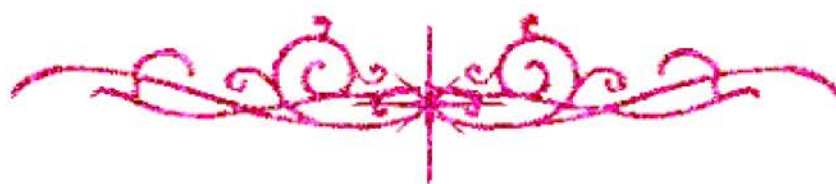


شبكة المعلومات الجامعية



بالرسالة صفحات

لم ترد بالأصل



**EFFICACY OF LOW LEVEL LASER THERAPY VERSUS  
ULTRASONIC IN CARPAL TUNNEL SYNDROME  
FOR DIABETICS**

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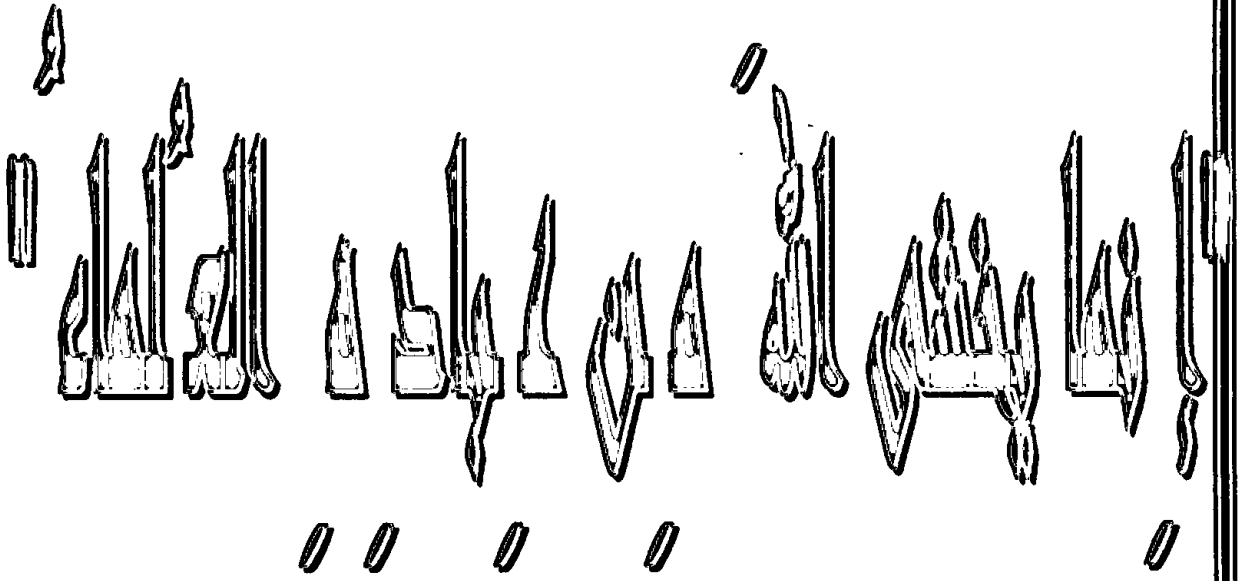
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صدق الله العظيم



**Efficacy Of Low Level LASER Therapy Versus Ultrasonic In Carpal Tunnel Syndrome For Diabetics/ Mahmoud Mohamed Nasser; Supervisors, Prof. Dr. Azza Abdel Aziz Abdel Hady, Prof. Dr. Ahmed Fathy Mohamed Genedy, Dr. Akram Abdel Aziz Sayed, Cairo University, 2006 (Master Degree)- pages.**

### **ABSTRACT**

**Background** Diabetes Mellitus is a significant problem that frequently restricts patients activity specially hand function due to Carpal Tunnel Syndrome. **The purpose** of this study was to investigate the efficacy of low level laser therapy Vs ultrasonic therapy in the treatment of CTS for diabetics. **Subjects.** 30 diabetic patients with CTS (11 males, 19 females), age ( $44.467 \pm 3.3$ ) years were randomly assigned into two groups: group (A) received LASER therapy & group (B) received ultrasonic therapy 3 times/week for six weeks. **Results.** Pain score was more significantly decreased in group A than in group B, mean was decreased from ( $7.13 \pm 1.3$ ) to ( $2.87 \pm 1.3$ ) and from ( $7.53 \pm 1.5$ ) to ( $7.07 \pm 1.49$ ) respectively. Hand grip measurements has more significant increase in group A than group B, mean was increased from ( $9.4 \pm 2.13$ ) to ( $16.2 \pm 2.27$ ) and from ( $9.73 \pm 2.12$ ) to ( $10.87 \pm 2.9$ ) respectively. EMG studies indicate that group A was improved more than group B after treatment. **Conclusion.** LASER therapy is more effective in the treatment of CTS for diabetics than ultrasonic as pain decreased and the hand function improved with laser than ultrasonic.

**Key words:** Diabetes mellitus, Carpal Tunnel Syndrome, LASER Therapy, Ultrasonic Therapy.

## *Acknowledgement*

*First of all, I pray thanking GOD for his blessings and giving me the patience and effort to achieve this work. I would like to acknowledge Prof. Dr. Azza Abdel Aziz Abdel Hady who took my hands to start the first step in the practical work by their unlimited helpful consultation and continuous generous guidance.*

*My deepest gratitude to Prof. Dr. Ahmed Fathy Mohamed Genedy for his kind supervision, genuine support and valuable opinions.*

*I would like also to give a special thank for Prof. Dr. Ayman El-Said Shafei for his cooperation and provide the facilities to execute the experimental part of the study.*

*Special thanks to Dr. Akram Abd-El Aziz Saied for his kind supervision and assistance.*

# *Dedication*

*To my parents, my wife and my children, who love and support enabled me to carry out this endeavor,*



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