بسم الله الرحمن الرحيم

Ain Shams University Information Network

جامعة عين شمس

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# شبكة المعلومـــات الجامعية

# التوثيق الالكتروني والميكروفيلم


شبكة المعلومات الجامعية

# جامعة عين شمس

## التوثيق الالكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد اعدت دون آية تغيرات


## يجب أن

تحفظ هذه الأفلام بعيداً عن الغبار

في درجة حرارة من 15 – 20 مئوية ورطوبة نسبية من 20-40 %

**To be kept away from dust in dry cool place of**
**15 – 25c and relative humidity 20-40 %**


# بالرسالة صفحات

# لم ترد بالأصـــل


# بعض الوثائق الأصلية تالفة

# INFLUENCE OF PROGRESSIVE PRESSURE RELEASE ON LOW BACK DYSFUNCTION

BY

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**THESIS**

Submitted to the Department of Basic Science in Partial Fulfillment of the requirement for the Master Degree in Physical Therapy



**Faculty of Physical Therapy**
**Cairo University**
**2007**

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# DEDICATION

*To my **Parents**: who made me what I am today, who taught me to love learning and who always made my education one of their top priorities; they have been my role-model for hard work, persistence and personal sacrifice, and who instilled in me the inspiration to set high goals and the confidence to achieve them.*

*This is also dedicated to my loving **Sisters** for their great support& encouragement.*

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**Influence of progressive pressure release on low back dysfunction/ Mary Nassif. Supervisors; Prof. Dr. Mohsen Mohamed El Sayyad, Dr. Neveen Abdel Lateef Abdel Raouf, Faculty of Physical Therapy, Cairo University & Prof. Dr. Hassan Mahmoud Baraka, Faculty of Medicine, Al Azhar University (Egypt). Faculty of Physical Therapy-Thesis; M.Sc., Basic Science Department; 2007.**

## Abstract

***Background & Purpose:*** Low back dysfunction is a universal problem striving for a solution. Myofascial dysfunction can be the main source of dysfunction and is characterized by myofascial trigger points. However there are not many controlled studies that have analyzed the effect of manual therapies in their treatment. The purpose of this study was to establish whether progressive pressure release had specific efficacy in management of myofascial trigger points in patients with low back dysfunction. ***Subjects:*** Thirty patients with low back dysfunction, aged 20 to 40 years (30.86,±5.35), with one or more trigger points in four selected lumbogluteal muscles (quadratus lumdorum, priformis, gluteus medius and minimus) participated in the study. ***Method:*** Subjects were randomly divided into 2 groups; group (A) was the control group that received myofascial release and spray and stretch, 3 days/week for 4 weeks. Group (B), the treatment group received the same treatment in addition to progressive pressure release, 3 days/week for 4 weeks. Lumbar range of motion was measured by a back range of motion device and trigger point tendemess was measured by an electronic algometer through pressure pain threshold value. Measurements were obtained in the first treatment session, pre-treatment and at the last session, post-treatment. ***Results:*** Data obtained was analyzed via paired and independent t-test. There were statistical differences between the 2 groups, where the treatment group showed greater improvement in lumbar range of motion and pain threshold with a p value ($P<0.05$). ***Discussion & Conclusion:*** Progressive pressure release was shown to be effective in reducing trigger point tenderness and in increasing lumbar range of motion, in individuals with low back dysfunction.

***Keywords*:** Low back dysfunction, Myofascial trigger points, Progressive pressure release, BROM device, Digital algometer, Pressure pain threshold.

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