

# **POST ISOMETRIC RELAXATION VERSUS POSITIONAL RELEASE TECHNIQUE IN TREATMENT OF CHRONIC LOW BACK DYSFUNCTION**

Thesis

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By

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## **DEDICATION**

*To my father (God peace and mercy up on him)and my mother; Both 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 brother and my sisters for*

*their help and support*

*Special dedication to my loving husband for his great*

*endless support & continuous encouragement.*



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**Post isometric relaxation versus positional release in treatment of chronic low back dysfunction/Sara Mohamed Samir/ Supervisors: Prof. Dr. Alaa Aldeen Abd Al Hakeem Balbaa/ Dr. Lilian Albert Zaki/ Dr. Marzouk Abd Alfatah Alythy** Faculty of Physical Therapy, Cairo University. Thesis: M.Sc Physical Therapy for Musculoskeletal Disorder and its Surgery, 2012.

## **Abstract**

**BACKGROUND:** Chronic low back dysfunction many factors is one of the most common complain of the working age population, there are many factors that contributing to CLBD and large group of them are without clear a etiology. Both Post Isometric Relaxation and Positional Release Technique considered effective manipulative osteopathic techniques in treatment of CLBD. Yet difference in efficacy between both techniques is not known.

**OBJECTIVES:** The purpose of this study was to compare between the efficacy of PIR and PRT on pain level. Rang Of Motion and functional activities in patients with CLBD.

**METHODS:** Thirty patients from out patient clinic of faculty of physical therapy Cairo University, had participated in this study; they were randomly assigned in two groups (group A, B). With age ranged from 30 to 50 years. Group A consisted of 15 patient (8 males and 7 females) with mean age 40.0 ( $\pm 4.81$ ) years, received PIR technique and conventional physical therapy program. Group B consisted of 15 patients (5 males, 10 females) with mean age 42.93 ( $\pm 6.68$ ) years, received PRT and conventional physical therapy program.

**RESULTS:** The results revealed that there was no significant difference between PIR and PRT on pain level, ROM and functional activities. **CONCLUSION:** Both PIR and PRT were shown to be effective in reducing pain level, improving ROM and function in patients with CLBD, but no statistical significant difference was proven between both of them.

**Key Words:** Low back dysfunction, Post isometric relaxation technique, Positional release technique, Oswestry disability index.





## **LIST OF ABBREVIATIONS**

<b>CLBD</b>	: Chronic Low Back Dysfunction.
<b>CRPS</b>	: Chronic Regional Pain Syndrome.
<b>IVD</b>	: Inter Vertebral Disc.
<b>MTrPs</b>	: Myofascial Trigger Points.
<b>PIR</b>	: Post Isometric Relaxation.
<b>PRT</b>	: Positional Release Technique.
<b>SCS</b>	: Strain Counter Strain.
<b>TePs</b>	: Tender Points.



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