

THE COMBINED EFFECT OF MOBILIZATION AND THERAPEUTIC EXERCISES VERSUS THERAPEUTIC EXERCISES IN TREATMENT OF SHOULDER IMPINGEMENT SYNDROME

Thesis

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By

MOHAMMED ALI MOHAMMED

BSc. PT, 2001

Department of Physical Therapy for Musculoskeletal
Disorders and Its Surgery

SUPERVISORS

Prof. Dr. Ibrahim Magdy Elnaggar
Professor and Chairman Department of
Physical Therapy for Musculoskeletal
Disorders and Its Surgery
Faculty of Physical Therapy
Cairo University

Prof. Dr. Samir Elsayed Seleem
Consultant and Chairman of the
Department of Orthopedic Surgery
Elsahel Teaching Hospital Cairo

Dr Hatem Mohammed Elazizi
Lecturer of Radiology
Faculty of Medicine
Cairo University

Faculty of Physical Therapy
Cairo University
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التأثير المشترك للمعالجة اليدوية والتمارين العلاجية في مقابل التمارين العلاجية في علاج متلازمة انحشار الكتف

توطئة

للحصول علي درجة الماجستير في العلاج الطبيعي لاضطرابات
الجهاز العضلي الحركي وجراحاتها

رسالة مقدمة من

محمد علي محمد عبد الرحمن

بكالوريوس العلاج الطبيعي ٢٠٠١

قسم العلاج الطبيعي لاضطرابات الجهاز العضلي الحركي وجراحاتها

هيئة الإشراف

أ.د. سمير السيد سليم

استشاري ورئيس قسم جراحة العظام

بمستشفى الساحل التعليمي

القاهرة

أ.د. إبراهيم مجدي النجار

أستاذ ورئيس قسم العلاج الطبيعي لاضطرابات

الجهاز العضلي الحركي وجراحاتها

كلية العلاج الطبيعي - جامعة القاهرة

د. حاتم محمد الغريزي

مدرس الأشعة التشخيصية

كلية الطب

جامعة القاهرة

كلية العلاج الطبيعي

جامعة القاهرة

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التأثير المشترك للمعالجة اليدوية والتمارين العلاجية في مقابل التمرينات العلاجية في علاج متلازمة انحشار الكتف، محمد علي محمد، المشرفون: أ.د. إبراهيم مجدي النجار، أ.د. سمير السيد سليم ، د. حاتم محمد الغريزي. درجة الماجستير ٢٠٠٩.

المستخلص

يهدف هذا البحث إلي مقارنة التأثير المشترك للمعالجة اليدوية والتمارين العلاجية في مقابل التمرينات العلاجية في علاج متلازمة انحشار الكتف. وقد أجريت هذه الدراسة علي عينة مكونة من ثلاثين مريضا تم تقسيمهم عشوائيا إلي مجموعتين متساويتين، المجموعة الأولى (أ): مجموعة التمرينات العلاجية والمجموعة الثانية (ب): مجموعة المعالجة اليدوية إلي جانب التمرينات العلاجية. تم علاج كل مريضا لمدة ١٢ جلسة خلال فترة أربع أسابيع وقد تم تقييم شدة الألم بالكتف والعجز الوظيفي للذراع وحركات الرفع لأعلي والأبعاد ولف الذراع للداخل والمسافة بين رأس عظمة العضد والنتوء الغرابي للوح باستخدام الموجات فوق الصوتية قبل وبعد إنهاء تطبيق البرنامج العلاجي.

توصلت الدراسة إلي أن كلا من التمرينات العلاجية. والتأثير المشترك للمعالجة اليدوية والتمرينات العلاجية طرق فعالة في علاج متلازمة انحشار الكتف مع أفضليه ملحوظة للتأثير المشترك للمعالجة اليدوية والتمرينات العلاجية.

الكلمات الدالة: متلازمة انحشار الكتف - المعالجة اليدوية - التمرينات العلاجية - المسافة بين رأس عظمة العضد والنتوء الغرابي للوح.

الملخص العربي

الهدف من هذا البحث هو مقارنة التأثير المشترك للمعالجة اليدوية والتمارين العلاجية في مقابل التمرينات العلاجية في علاج متلازمة انحشار الكتف . وقد اجري هذا البحث علي ثلاثين مريضا تم تقسيمهم عشوائيا إلي مجموعتين متساويتين .

المجموعة الأولى: (مجموعة التمرينات العلاجية) وتكونت من ١٥ مريضا متوسط أعمارهم ٣٦.٤٨ (+ ٦.٦٨) تم علاجهم بالأشعة تحت الحمراء يليها برنامج من التمرينات العلاجية.

المجموعة الثانية: (مجموعة المعالجة اليدوية) وتكونت من ١٥ مريضا متوسط أعمارهم ٣٦.٢٦ (+ ٦.٥٤) تم علاجهم بالأشعة تحت الحمراء يليها نفس برنامج التمرينات العلاجية الذي أخذته المجموعة الأولى إلي جانب المعالجة اليدوية.

تم علاج كل مريض لمدة أربع أسابيع بمعدل ٣ جلسات في الأسبوع بإجمالي ١٢ جلسة ، وقد تم قياس شدة الألم في الكتف ومعدل العجز الوظيفي للكتف وحركات الرفع للاعلي والإبعاد ولف الذراع للداخل إلي جانب المسافة ما بين رأس عظمة العضد والنتوء الغرابي للوح باستخدام الموجات فوق الصوتية قبل الدراسة وبعد انتهاء الدراسة.

وأثبتت النتائج تحسنا ملحوظا في كلتا المجموعتين بعد العلاج مع وجود فروق إحصائية بين المجموعتين بالنسبة لكل المتغيرات التي تم قياسها قبل العلاج وبعده. وأثبتت النتائج أيضا أن التأثير المشترك للمعالجة اليدوية والتمارين العلاجية له أفضلية ملحوظة علي التمرينات العلاجية منفردة في قليل شدة الألم والعجز الوظيفي للكتف وزيادة المدي الحركي لحركات الرفع الاعلي والإبعاد ولف الذراع للداخل إلي جانب المسافة ما بين رأس عظمة العضد والنتوء الغرابي للوح.

The combined effect of mobilization and therapeutic exercises versus therapeutic exercises in treatment of shoulder impingement syndrome. Mohammed Ali Mohammed- Supervisors: **Prof. Dr. Ibrahim Magdy Elnaggar, Prof. Dr. Samir Elsayed Seleem, Dr. Hatem Mohammed Elazizi.** Master Degree.2009.

Abstract

Purpose: We investigated the combined effect of mobilization and therapeutic exercises in treatment of shoulder impingement syndrome. **Subjects:** Thirty patients diagnosed as shoulder impingement syndrome stage II Neer classification due to mechanical causes. **Methods:** Patients were randomly distributed into two equal groups. The first experimental group consisted of 15 patients with a mean age of 36.47(\pm 6.68) years; received infrared radiation followed by a program of therapeutic exercises. The second experimental group consisted of 15 patients with a mean age of 36.26(\pm 6.54) years; received infrared radiation followed by a combined program of mobilization techniques and therapeutic exercises identical to those applied to the first group. Treatment was given 3 times per week, each other day, for 4 consecutive weeks. Patients were evaluated pretreatment and posttreatment for shoulder pain severity, shoulder functional disability, shoulder flexion, abduction and internal rotation motions and shoulder acromiohumeral distance in adduction and abduction using ultrasonography. **Results:** Patients of both groups showed significant improvement in all the measured variables. In between groups difference the second group showed a significant improvement than the first group in all the measured variables. **Conclusion:** Both of the therapeutic exercises and the combination of therapeutic exercises and mobilization had a significant effect on decreasing shoulder pain severity and shoulder functional disability. Also there were an increasing in shoulder flexion, abduction, internal rotation motions. As well as the (AHD) both in adduction and abduction. However, the combination of mobilization and therapeutic exercises were more effective than the therapeutic exercises alone in the treatment of shoulder impingement syndrome patients.

Key words: impingement syndrome, therapeutic exercises, joint mobilization, acromiohumeral distance (AHD).

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Contents

Contents	Page
List of tables	V
List of figures	VI
List of abbreviations	VIII
Chapter I: Introduction	
Purpose of the study	3
Need for the study	4
Assumptions	7
Delimitations	7
Hypotheses	8
Definition of terms	10
Chapter II: Review of literature	
Definition and incidence of shoulder impingement syndrome	12
Anatomical and biomechanical considerations of shoulder impingement syndrome	13
Scapulothoracic articulation kinematics	16
Tendon and bursa pathology	19
Influence of thoracic and cervical spine on scapular and glenohumeral motions	20
Posterior capsule	21
Rotator cuff musculature	22
Scapular musculature	26
Assessment of shoulder impingement syndrome patients	28
Treatment of shoulder impingement syndrome	33
Role of therapeutic exercises in treatment of shoulder impingement syndrome	35
Role of mobilization in treatment of shoulder impingement syndrome	39

Contents	Page
The combined effect of mobilization and therapeutic exercises in treatment of shoulder impingement syndrome	42
Chapter III: Materials and Methods	
Subjects	44
Inclusion criteria	44
Instrumentation	45
Assessment procedures	45
Pain and functional disability assessment	45
Measurement of shoulder flexion range of motion	46
Measurement of shoulder abduction range of motion	47
Measurement of shoulder internal rotation motion	48
Measurement of shoulder (AHD)	49
Treatment procedures	51
Application of infrared on the shoulder	51
Stretching exercises for posterior elements	52
The four strengthening exercises using thera-elastic band	54
Seated press up and elbow push up exercises	55
Mobilization techniques	56
Chapter IV: Results	57
Demographic data of patients	57
Comparison between groups before treatment	58
Shoulder pain severity within the first experimental group	59
Shoulder pain severity within the second experimental group	59
Between groups difference for shoulder pain severity	60
Shoulder functional disability within the first experimental group	61

Contents	Page
Shoulder functional disability within the second experimental group	62
Between groups difference for shoulder functional disability	62
Shoulder flexion within the first experimental group	64
Shoulder flexion within the second experimental group	64
Between groups difference for shoulder flexion	65
Shoulder abduction within the first experimental group	66
Shoulder abduction within the second experimental group	67
Between groups difference for shoulder abduction	67
Shoulder internal rotation within the first experimental group	69
Shoulder internal rotation within the second experimental group	69
Between groups difference for shoulder internal rotation	70
Shoulder acromiohumeral distance in adduction within the first experimental groups	71
Shoulder acromiohumeral distance in adduction within the second experimental groups	72
Between groups difference for shoulder acromiohumeral distance in adduction	73
Shoulder acromiohumeral distance in abduction within the first experimental groups	74
Shoulder acromiohumeral distance in abduction within the second experimental groups	75
Between groups difference for shoulder acromiohumeral distance in abduction	75
Posthoc analysis	77
Chapter V: Discussion	80
Chapter VI: Summary, Conclusions and Recommendations	88
References	91
Arabic summary	

List of Tables

	Page
1. Demographic data of patients	57
2. Comparison between groups before treatment	58
3- Summary of posttreatment results	79

List of Figures

	Page
1- The translator force in the glenoid cavity	14
2- Role of the long head of biceps in shoulder stability	16
3- Scapular motion and its axes	17
4- Individual axes and rotation used to describe scapular orientation and position	18
5- The angles of pull of the rotator cuff	23
6- Compression force of rotator cuff in the humerus	25
7- Determination of rotator cuff tear with ultrasonography	29
8- The relationships between the acromion, and the humeral head with ultrasonography	31
9- Measuring the (AHD) with ultrasonography	32
10- Measuring of shoulder flexion range of motion	46
11- Measuring of shoulder abduction range of motion	47
12- Measuring of shoulder internal rotation	48
13- Measuring of shoulder (AHD)	49
14- Measurement of shoulder (AHD) on lateral surface	50
15- Application of infrared on the shoulder	51
16- Stretching exercises for posterior elements	52
17- The four strengthening exercises using thera-elastic band	54
18- Seated press up and elbow push up exercises	55
19- Mobilization techniques	56
20- Shoulder pain severity within the first experiment group	59

	Page
21- Shoulder pain severity within the second experiment group	60
22- Between groups difference for shoulder pain severity	60
23- Shoulder functional disability within the first experimental group	61
24- Shoulder functional disability within the second experimental group	62
25- Between groups difference for shoulder functional disability	63
26- Shoulder flexion within the first experimental group	64
27- Shoulder flexion within the second experimental group	65
28- Between groups difference for shoulder flexion	65
29- Shoulder abduction within the first experimental group	66
30- Shoulder abduction within the second experimental group	67
31- Between groups difference for shoulder abduction	68
32- Shoulder internal rotation within the first experimental group	69
33-Shoulder internal rotation within the second experimental group	70
34- Between groups difference for shoulder internal rotation	70
35- Shoulder acromiohumeral distance in adduction within the first experimental group	72
36- Shoulder acromiohumeral distance in adduction within the second experimental group	72

	Page
37- Between groups difference for shoulder acromiohumeral distance in adduction	73
38- Shoulder acromiohumeral distance in abduction within the first experimental group	74
39- Shoulder acromiohumeral distance in abduction within the second experimental group	75
40- Between groups difference for shoulder acromiohumeral distance in abduction	76

List of Abbreviations

SIS	Shoulder impingement Syndrome
AHD	Acromiohumeral distance
SPADI	Shoulder pain and disability index
ROM	Range of motions