



Rehabilitation Program for Surgical Shoulder Joint Protrusion among Team Games Players Injured

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ABSTRACT

Shoulder joint is exposed to the four joints that include multiple injuries or lack of career work because it is a wide-motion joint. removal, approximation movement, rotation movement of the interior, and movement of rotation abroad, and injury are tax accompanying training and sports competitions that athlete and his team pay, as sports training and high training volumes represent in addition to form, strength, and many sports competition, factors that contribute In increasing motor pressure on joints and muscles working in technical performance. This study used an experimental curriculum in the design of tribal measurement, the sample was chosen intentionally, and they are 4 players of the band from the volleyball team with shoulder pain measuring of tracker and measuring after the experimental group. Shoulder caused by the presence of other third types of bump, and the most important recommendations were (1) Taking into account followers of the qualifying program when surgical intervention to refine other bumps of the shoulder joint at an early date because it is a state of non-interference early and precisely, it is difficult for shoulder joints to recover their functional efficiency to practice technical performance among band players, including volleyball, and (2) Use more modern and accurate measures to assess shoulder problems for athletes.

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1. INTRODUCTION

International Sports Federation indicated that there are approximately 800 million practitioners at least once a week. If this number is true, different games have been conducted every time in the world. Despite this great popularity of sports, injuries occur during practice. But they are not classified as serious injuries. Monash Research Center report indicated, "Two-thirds or more of difference in casualties, including volleyball game, are found in shoulder, knee, ankle, and hand (Cuñado-González *et al.*, 2019; Smithers & Myers, 1985).

The shoulder joint is exposed to four joints that include multiple injuries or lack of job work because it is a wide-motion joint, it can move in three axes (sagittal, frontal, and horizontal) with basic movements of rest: movement of arrest, and rug movement, And the movement of removal, movement of approximation, movement of the interior, and movement of rotation outside, it consists of four separate joints. It is the joint between the head of humerus of bone of plate (GH), and meeting of collarbone with or bump of board (AC), the convergence of bone of shear with collarbone (SC), the tablet is separated with chest area (ST), where it must work together and simultaneously harmoniously". forms of the last bump to three types of m, the third of which are hooks, as well as in form can lead to compression of rotating muscles by pushing the arm up, and the presence of bone appendages under the joint (AC) leads to compression and injury.

Sports injury is associated with training and sports competitions paid for by the athlete and his team, as it represents sports training and high training sizes in addition to form, strength, and a large number of sports competitions. Factors that contribute to increasing motor pressure on joints and muscles working in technical performance, until proven In references and scientific studies of sports medicine, special injuries are associated with certain activities and from difference in difference in which injuries occur during performance are sport of volleyball that constitutes ballistic nature of technical performance of some of basic offensive skills such as overwhelming beating and transmitting strong pressure on total of four shoulder joints, technical performance of overwhelming beating and transmission represents a very complex and stressful artistic movement for shoulder joint, as nature of performance of the movements represents a motor pressure resulting from strength generated by movement of arm to strike ball, results in large number of players 'skepticism in shoulder joint more than once during training season, especially strikers who hit team. field of motor rehabilitation found a necessity to deal with shoulder pain resulting from the existence of a third type of last bump at speed of surgical intervention in the artifact, as delay in this procedure may lead to rupture of muscle-tendon with bold heads, in addition to fibrosis and inflammation, often the player cannot attract appropriate medical procedure Except after end of the sports season, which prolongs injury period, so this study seeks to design a rehabilitation program that allows a return to sports activities efficiently as quickly as possible after surgery of bumpy shoulder joint (Paine & Wilk, 1994).

This study aims to several points:

- (i) Learn growth rates in muscle strength of muscles working on the shoulder joint of the affected party.
- (ii) Amount of change in measuring the perimeter of Hummers from contracting.

Research hypotheses are the following:

- (i) There are statistically significant differences between the two tribal measurements and post-measurement in favor of average dimension in variables of the shoulder evaluation

scale for athletes (pain, strength and endurance, joint stability, pain, performance, and motor range).

- (ii) There are statistically significant differences between the two tribal measurements and post-measurement in favor of the average dimension in the strength of muscles working on the affected shoulder joint.
- (iii) There are statistically significant differences between the two tribal measurements and post-test measurements in favor of the average dimension in the amount of change in the vicinity of hummers from contracting.

Research fields are the following:

- (i) Spatial field: Tribal measurements and rehabilitation programs were applied at Consultative Center/ Basra University.
- (ii) Time's field: the study was conducted during the period from 15 Nov 2022 to 12 April 2023.
- (iii) Human field: Al -Bahri Club & al mina Club players (Team games) for volleyball.

2. METHODS

2.1. Research methodology and field procedures

The following are the research methodology components:

- (i) Research Curriculum. This study used an experimental curriculum with a tribal measurement design, measuring middle.
- (ii) Research Sample. The research sample was chosen intentionally, and y are (4) players of difference from the volleyball team and registered in records of Central Federation of Volleyball for the 2021/2022 season in Basra Governorate (Al -Bahri Club and Mina club) from those with shoulder pain caused by the presence of or third type And, which requires surgery to refine him with surgical endoscopy, **Table 1** shows a description of the research sample.
- (iii) Means and tools used in research. This study has based on collecting data related to this research on following means and tools:
- (iv) reference survey. This study reviewed scientific references specialized in sports medicine, injuries, and rehabilitation, to determine the reference background with the most important basic variables to manage the rehabilitation process after surgical work in artifacts to refine or third bump, as well as identify the main variables of the rehabilitation process after surgical work, In addition to job tests for measuring the variables to good guidance of qualifying program during its multiple stages.
- (v) Clinical Examination Tests. Where attending physician uses some clinical tests to help identify and diagnose injury, and it may require the use of X-ray or magnetic resonance waves (Ellenbecker & Davies, 2003).
- (vi) Sports shoulder assessment system. It is designed by the American Academy of Orthopedic Surgery and consists of several axes, each axis evaluates a specific variable and gives a degree, and total of the degrees is the level of assessment of the shoulder joint status of athletes.
- (vii) Muscle strength assessment of movement similar to the movement (ISOCONTE) using 3 BIODEX brand, where two -rotation movements were measured inside and spinning out from an angle of zero -degrees at a speed of 60 ° / s.

Tools and devices used in research are the following:

- (i) Restameter to measure the length (centimeter) and weight (kilogram).
- (ii) T letter (T).

- (iii) Dols and multi-weight weights.
- (iv) ISOCOTEC MCE (3) BIO-DEX
- (v) Infraide device.
- (vi) Aziazosown device.
- (vii) Gonometer to measure the shoulder joint
- (viii) measuring tape.
- (ix) Rocks of rubber resistors
- (x) Stop Watch to measure time to a second until (001) of a second.
- (xi) This study used SPSS statistical, Ver (19.)

Table 1. Description of Research Sample.

Case	Length cm	Wright Kg	Age Year	Training Age
1	189	87	26	11
2	188	86	25	10
3	189	90	22	12
4	187	86	30	11

2.2. Procedural Steps to Study: Basic Experience (qualifying program)

This study has conducted a study on a sample of 4 players, on the affected party with the regulation of severity, size, and density of exercises, and application was applied for a period of 12 a week at four stages, each stage lasts three weeks according to the severity of the injury and injured response, and many weekly program units is five Units, where unit time ranges from 35 to 60 minutes according to progress in program stages, in addition to following drug therapy prescribed by a specialist doctor, and qualification program was implemented from 12 December 2022 to 4 January 2023. Where the unit is divided into three main parts (warm-up, main, final), each training treatment unit from qualifying program units begins with the performance of a group of body movements to warm up and follow the application of the content of qualifying program (supplement 1), and After the unit is over, ice is used for 10 minutes.

The aim of the first stage (three weeks) is the following:

- (i) Pain relief, swelling after surgery
- (ii) Reducing inflammation.
- (iii) Restore negative kinetic range without pain.
- (iv) Emphasizing the positive kinetic term of board

To achieve the aim use of the pendulum, which is used after an injury to overcome the loss of movement when injury is also used as warm -up, as it exercises the use of a simple kinetic extent between plate and member. It follows negative motor range training of six movements (arrest, rugs, distance, approximation and rotation of interior and rotation outside) using a bar (T), during a painful movement, an active movement between plate and rib cage, and follows the use of exercises (Pulley System) where non -affected party is employed as source of strength.

Impact indicators for the second stage are the following:

- (i) The injured person can achieve a complete negative movement, in addition to the injury's ability to achieve rotation
- (ii) Inside, outside and arm on the side.

The aim of the second stage (three weeks) is the following:

- (i) Emphasizing and controlling painful and painless motor range

- (ii) Restore muscle inflation without inflammation or pain.
- (iii) Improving rhythm between hummers and plate.
- (iv) Stringing muscles responsible for tablet balance, which is a deviant square muscle, anterior seminar, major inherent).

Fixed prolonged exercises were used in basic directions of movement without pain, stringing deltoid muscle in movements of arrest, rugs, distance, and approximation, and all of the exercises use a type of fixed contracting, installed muscles of board (SCAPULAR Stabilizer) were stringed in all directions and movements of the plate, getting close, lifting, lowering, turning up above, curvatures forward and back. The muscles have an important role in preventing the occurrence of compression of the head of hummers in the movement of removal muscles responsible for tablet balance are stringed through exercises used by these Muscle groups such as shoulder press, shoulder shrugs training exercises (Push UP) and gradients from payment on the wall from stand Separation (zero) of sneezing and flatness.

Transition indicators for the third stage are the following: Injured person can achieve a completely positive movement, compared to the infected aspect, in addition to the person's ability to achieve a rotation of interior and outside, with a 45 degree.

The aim of the third stage is the following:

- (i) Full kinetic range
- (ii) Functional muscle performance improved
- (iii) Stringing muscles responsible for maintaining a humorous, which is (delusional muscle, big and small thoracic muscle, and broad dorsal muscle)

A set of exercises were used to string muscles responsible for lowering the head of homers (from conditions of retreating and digging to reduce the gravity of the earth Previous.

Transition indicators for the fourth stage are the following:

The injured person can achieve a complete positive motor extent, compared to the infected aspect, in addition to the person's ability to achieve stringing rotation of interior and outside with 90 degrees, and a complete stringing of muscle above the fork.

Aim of the fourth stage:

- (i) Stringing muscles responsible for maintaining head of hummers bone inside burgundy hole, which is. muscle under plate, muscle under fork, small round muscle)
- (ii) Symptoms are disappeared in exercising.

Exercises are used for upper limb, using small kinds (Swiss balls), and good balls are made that weigh from 1 to 3 kg that is used through chest scroll models (starting from slavery and standing) that motor performance of overwhelming multiplication movement is similar, stringing muscles installed plate, stringing muscles to maintain position of hummers, multi - joint exercises.

2.3. Field Research

2.3.1. Tribal Measurement

Tribal measurements of the search sample were conducted on 20/11/2022 in Research variables (length, weight, age), as well as the relationship between two rotating movements of interior and spin out from an angle of zero degrees at a speed of 60 degrees/s in muscular contract similar) Using a brand (3 BIODEX) at Basra University Medical Consultant Center for all research sample players from different games.

2.3.2. Implementing basic Experience (qualifying program)

The qualification program was applied to the research sample during the period from 12 December 2022 to 4 January 2023 as **Table 2**.

Table 2. A model for some rehabilitation units.

Variables device	Repetition	Repetition between groups	Comfort between rest	Comfort between device
Infraide device	5-10 m	1	-	2 m
Aazososnid device	5-10 m	1	-	2 m
Massage device	5- 10 m	1	-	2 m
Physical exercises used	Repetition	groups		
Lifting and lowering arms	5	2	15 sec	
Rotation of arms out.	5	2	15 sec	
Rotation of arms from inside.	5	2	15 sec	
Arms are tangled from the back, lifting and lowering.	5	2	15 sec	
Arms are tangled from the front, lifting and lowering it.	5	2	15 ec	

2.3.3. Post-Test:

Postgraduate measurement of the study sample of measurement unit was conducted on 4 March 2022 for all research sample players from different games.

3. RESULTS

3.1. The first case

It is clear from **Table 3**, variables of the shoulder assessment scale for athletes of the first case that the amount of kinetic extent ranged from 4 to 8 in the amount of improvement between tribal and post-measurement respectively, while the amount of performance ranged from 0 to 30, in the amount of improvement between tribal measurement and a dimension respectively, as well as it is clear from the table that intensity of pain has ranged from 2 to 8 in the amount of improvement between tribal and post measurement respectively, as well as improvement of amount of stability as it has ranged from 4 to 8. This is in the amount of improvement between tribal measurement and a dimension respectively, as well as from the table that force/endurance ranged from 2 to 8 in the amount of improvement between tribal and post measurement respectively, as well as improvement of amount of pain as it has ranged from 2 to 8. This is in the amount of improvement between tribal measurement and after a row.

Table 3. Specified shoulder assessment scale for athletes for the first case.

Variables Measurement	Unite Measurement	Kinetic Range	Performance	Severity of Pain	Stability	Potential / Endurance	Pain
Tribal	degree	4	0	2	4	2	2
Tracker	degree	8	0	6	6	4	4
Post-test	degree	6	30	8	8	8	8

3.2. The first case

It is clear from **Table 4**, variables of the shoulder assessment scale for athletes for the second case that the amount of kinetic extent ranged from 2 to 8 in the amount of improvement between tribal measurement and after a row, while the amount of performance ranged from 0 to 30, in amount of improvement between tribal measurement and a dimensional measurement respectively, as well as it is clear that intensity of pain has ranged from 0 to 8 in the amount of improvement between tribal and post measurement respectively, as well as improvement of amount of stability as it has ranged from 2 to 8 in the amount of improvement between tribal measurement and a dimension respectively, as well as schedules that force / endurance ranged from 2 to 8 in the amount of improvement between tribal and post measurement respectively, as well as improvement of amount of pain as it has ranged from 0 to 6 in the amount of improvement between tribal measurement and a dimension, respectively.

Table 4. Variables of shoulder evaluation scale for athletes for the second case.

Variables Measurement	Unite Measurement	Kinetic Range	Performance	Severity of Pain	Stability	Potential / Endurance	Pain
Tribal	degree	2	0	0	2	2	0
Tracker	degree	4	0	6	4	4	4
Post-test	degree	8	30	8	8	8	6

3.3. The first case

It is clear from **Table 5** variables of the shoulder assessment scale for athletes of the first case that the amount of kinetic extent ranged from 4 to 8 in the amount of improvement between tribal and post-measurement respectively, while the amount of performance ranged from 0 to 40, in the amount of improvement between tribal measurement and a dimension respectively, as well as it is clear from the table that intensity of pain has ranged from 2 to 8 in the amount of improvement between tribal and post measurement respectively, as well as improvement of amount of stability as it has ranged from 4 to 8 This is an amount of improvement between tribal measurement and a dimension respectively, as well as from table that force / endurance ranged from 2 to 8 in the amount of improvement between tribal and post measurement respectively, as well as improvement of amount of pain as it has ranged from 2 to 6. This is an amount of improvement between tribal measurement and a dimension, respectively.

Table 5. Variables of a shoulder assessment scale for athletes for the third case.

Variables Measurement	Unite Measurement	Kinetic Range	Performance	Severity of Pain	Stability	Potential / Endurance	Pain
Tribal	degree	4	0	2	4	2	2
Tracker	degree	6	0	6	6	4	4
Post-test	degree	8	40	8	8	8	6

3.4. The fourth case

It is clear from **Table 6** variables of the shoulder assessment scale for athletes for the fourth case that the amount of kinetic extent ranged from 4 to 8 in the amount of improvement

between tribal and post-measurement respectively, while the amount of performance ranged from 0 to 30, in the amount of improvement between tribal measurement and a dimension respectively, as well as it is clear from the table that severity of pain has ranged from 2 to 8 in the amount of improvement between tribal measurement and dimension respectively, and improvement of amount of stability as it ranged from 4 to 8, In the amount of improvement between tribal measurement and after a row, it is also clear from the table that force/endurance ranged from 4 to 8 in the amount of improvement between tribal and post measurement respectively, as well as improvement of amount of pain as it has ranged from 2 to 8 in the amount of improvement between tribal measurement and post measurement.

It is clear from **Table 7** that we are statistically significant differences at a moral level (0.05) between tribal measurements Traveling measurement and post-measurement, as well as between tracing measurement and tribal measurement, as well as between tribal measurement and post-measurement in all variables of the shoulder assessment scale for athletes

Table 6. Variables of shoulder evaluation scale for athletes of the third case.

Variables Measurement	Unite Measurement	Kinetic Range	Performance	Severity of Pain	Stability	Potential / Endurance	Pain
Tribal	degree	4	0	2	4	4	2
Tracker	degree	6	0	6	6	4	4
Post-test	degree	8	30	8	8	8	8

Table 7. Indicating differences between measurements of research group Shoulder assessment.

Variables	Measurement	Average	Mediator	range	Average grade	Freedom degree	Differs	Indication
pain	Tribal	1.50	2.00	2.0	2.88	1	0.88	8.820
	Tracker	4.00	4.00	0.0	1.88			
	Post-test	7.50	8.00	2.0	3.88			
potential / endurance	Tribal	2.50	2.00	2.0	2.23	1	2.58	8.911
	Tracker	4.00	4.00	0.0	2.00			
	Post-test	8.00	8.00	0.0	3.88			
Stability	Tribal	3.50	4.00	2.0	2.88	1	0.88	0.820
	Tracker	5.50	6.00	2.0	1.88			
	Post-test	8.00	8.00	0.0	3.88			
severity of pain	Tribal	1.50	2.00	2.0	2.88	1	0.88	0.820
	Tracker	6.00	6.00	0.0	1.88			
	Post-test	8.00	8.00	0.0	3.88			
performa nce	Tribal	0.00	0.00	0.0	2.68	1	0.88	0.820
	Tracker	0.00	0.00	0.0	2.68			
	Post-test	32.50	30.00	10.0	3.88			
kinetic range	Tribal	3.50	4.00	2.0	2.88	1	0.88	0.820
	Tracker	5.50	6.00	2.0	1.88			
	Post-test	8.00	8.00	0.0	3.88			
Evaluation	Tribal	12.50	14.00	10.0	2.88	1	0.88	0.820
	Tracker	25.00	26.00	4	1.88			
	Post-test	72.00	70.00	12.0	3.88			

4. DISCUSSION

4.1. Discuss the significance of differences between research measurements in variables of shoulder evaluation scale for athletes through:

Pain, strength and endurance, pain, joint stability, performance, and kinetic range are clear from the results of **Table 7** that are statistical differences with moral significance at level (0.05) between Research measurements (tribal, tracing, dimension) in variables of a shoulder assessment scale for athletes. Statistical differences of significant significance at level (0.05) between tribal measurement and tracing measurement, dimension in favor of upward measurement, in all variables of a shoulder assessment scale for athletes, where average pain in tribal measurement (10.50) was in the tracker (4.00) analog. It expresses the severity of pain, it was in tribal measurement (10.50), in tracing measurement (6.00), and post-measurement (8.00).

This study attributes results that the proposed qualification program is progressing towards achieving the primary goal, which is the return of natural and basic functions of the shoulder joint, as well as good design of the qualifying program due to a positive impact on the speed of decline in pain, as controlling pain is the first goal of the rehabilitation process and an indicator. Effectiveness of treatment stages as the first goals of treatment rehabilitation programs are decline in pain because it represents a disability for basic functions of the joint shoulder, as control of pain is an important indication of the progress of treatment plan. The average script of the shoulder joint in tribal measurement (3.50), became (5.50) in tracing measurement, and reached (8,000). In the post-measurement, as was the average degree of strength and endurance in tribal measurement (2.50), and tracing measurement (40), post-measurement (8,000), this variable measure feeling of fatigue during the practice of daily activities. This this study attributes this to that proposed qualification program included in one of its components on training that uses negative and positive kinetic range "according to gradual and progress in qualifying program with aim of restoring full motor range of joint without pain" second goal of motor rehabilitation process. It is restoration of complete motor range without restrictions, and that obtaining an unlimited and non-painful movement is one of most important goals of rehabilitation of shoulder, as anatomical structure of shoulder joint helps in breadth of kinetic, which increases difficulty of rehabilitation process, as shoulder joint consists of Four separate joints must work together and at one time, and this is consistent with Daniel, " shoulder joint with its wide motor extent," is one of most difficult joints in rehabilitation, and that rehabilitation shoulder joint efficiently restores basic functions of upper limb of body, in addition to what [David and Brad \(2000\)](#) second goals of rehabilitation process is to restore lost motor range after injury, in addition to special nature of flexibility component, which decreases from non-use and training on it and this is what injury process is accompanied by loss of ability to use for complete motor extent of joint, that use of flexibility exercises aimed at restoring. Adaptation is an important process to compensate for decrease in level of flexibility in a specific joint after injury.

Level (000) between study measurements (tribal, dimension) in amount of torque of muscle strength, and this study attributes the differences that occurred this change in favor of dimension to build qualifying program that applied to members of study sample, which gave a positive indication of improving muscle strength of muscles Working on shoulder joint, where restoration of muscle strength is second goal in terms of importance after restoring full motor range without pain in rehabilitation process after injury, that this is most important goals in field of rehabilitation after injury or surgery. It is restoration of muscle strength and

endurance, "and that training of strength after injury must be done under control and complete supervision, taking into account decrease in intensity of training, and that fixed stringing exercises must start as quickly as possible after injury, as this form of contracting helps prevent atrophy Muscles after injury, and reduces tissue adhesions after surgery, as this study sponsored planning of qualifying program to use of a codified group of exercises in a qualitative and specialized manner, with aim of influencing muscle groups in itself to achieve goal of tightening plate and bringing it closer to spine, as qualifying program was concerned with By stringing muscle groups responsible for restoring basic anatomical situations of hummers bone and board bone, according to a specific sequence and arrangement, and rehabilitation program is use of many exercises that are based on educational requirements in terms of gradient in quality of exercises given, using conditions of slavery and discipline to reduce gravity of ground using contractions Fixed and moving contractions with tools and without tools, and gradual weights and even limits of pain, reaching end of period of qualifying program for functional exercises in general and private form in terms of range, speed and strength, as element of muscle strength is one of physical elements that require a long time for adaptation and construction in muscles more than time required to decrease and decrease in muscle strength rates during periods of interruption during injury, which showed at beginning of qualifying program relatively slow in developing muscle strength to grow degree of pain and inability of injured to achieve a full motor extent, as force training must be done in A complete kinetic extension, that use of different work angles helps in balanced and integrated growth of muscle fibers in full in addition to that this study relied on In planning qualifying program until principles of functional motor work to improve motor harmony of a compound and wide -motion joint such as shoulder joint, through multi -joint exercises, and this shows qualification program to achieve its goals, and this is what [Myers et al. \(2005\)](#) to " stringing exercises for serrated muscle and upper fibers of deviant square muscle are essential and main in improving level of muscle strength to solve weakening problems, as installed muscles of board bone were stringed, As well as stringing muscles that help maintain head of hummers in face of burgundy hole, during full kinetic term, this is one of foundations for planning preventive and rehabilitation programs that aim to develop restoration of muscle strength of upper party as a whole, which was done through analyzing needs of groups muscle that must be stringed to reach targeted basic movements, as well as direction of muscle work to achieve this target, knowledge of functional effect of driving muscles of board on building muscle strength of shoulder joint is basis for building programs to restore muscle strength in cases of prevention or rehabilitation. This achieves validity of the second assumption of research that qualification program with its exercises has a positive impact on improving strength Muscle.

4.2. Discuss the significance of differences between study measurements in the amount of change in measuring the perimeter of hummers.

It is clear from the results of **Table 7** that statistical differences with significant significance at level (0.5) between measurements of study (distant tribal) in measuring the perimeter of hummers from contracting, showed the existence of statistical differences with moral significance at level (000). Between tribal measurement and post measurement, This study and this study is attributed to differences that occur between study measurements in vicinity of hummers from contract that one of goals of qualifying program that was applied to members of study sample is restoration of muscle strength and endurance, accordingly, muscle inflation represents a form of anatomical response and functional for muscle development, it means increasing muscle mass and its cross section, and this increase in

muscle perimeter is due to increase in muscle fiber width that constitutes muscle, growth of muscle size and its enlargement occurs due to special weight exercises, as physiological adjustment of resistance training is muscle inflation, and Which occurs as a result of increasing physiological section of muscle fibers, as well as restoring improvement of functional muscle performance as increasing physiological passage is an indication of muscle strength, and confirms effectiveness of building qualifying program in restoring muscle strength, as basis in process of stringing is use of light weights and high repetitions , that "under influence of weightlifting programs, muscle enlargement occurs as a result of increasing area of syllable of symptom of muscle fibers, and that it is result of cases of injuries and lack of muscle training muscle. It occurs a shortage of area of cross section and muscular atrophy, "as when the muscle becomes in an inactive condition as a result of restriction of its movements, this leads to rapid changes that start during first six hours, where the rate of building proteins decreases, which reduces the size of muscle tissue and decreases the level of strength is significant during the first week to restrict movement at a rate of (3-4%) per day, in addition to low level of muscle nervous activity, and that period of muscle return to its cases before the injury is at a slower rate of decline in the situation during injury, and this shows the importance of considering perimeter of homers One of the important indicators in process of rehabilitating shoulder compression.

5. CONCLUSION

This study concludes:

- (i) Proposed qualification program in light of integrated treatment due to positive changes of pain, motor, and muscle strength, which allows the speed of players to practice technical activity.
- (ii) The motor range of the shoulder joint was restored to restore muscle strength, which means objectivity of the kinetic qualification program in restoring basic functions of the shoulder joint and upper end as a whole, so he did not restore motor force at the expense of flexibility but coupled with it.
- (iii) All measurements of research variables indicated statistically significant differences before the implementation of the qualifying program, the differences almost disappeared after the completion of the implementation of the program.

Recommendations are the following:

- (i) Taking into account followers of the qualifying program when surgical intervention to refine or bump the shoulder joint at an early date because it is a state of non -interference early and precisely, it is difficult for shoulder joints to recover functional efficiency to practice technical performance among band players, including volleyball.
- (ii) Use more modern and accurate measures to assess shoulder problems for athletes.
- (iii) The necessity of conducting more studies on athletic young people practicing difference (volleyball) to evaluate shoulder problems and thus legalize prevention programs.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

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