



ORIGINAL RESEARCH PAPER

Physiotherapy

EFFECTS OF STATIC STRETCHING ON SHOULDER FLEXIBILITY AMONG VOLLEYBALL PLAYERS

KEY WORDS: Static stretching , internal rotation , external rotation , goniometer, volleyball players.

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ABSTRACT

BACKGROUND OF THE STUDY: Flexibility and shoulder strength are very important while playing volleyball. It is a complex movement pattern requiring flexibility, muscular, strength coordination and neuromuscular efficiency. Static stretching (SS) is one of the most frequently used methods for the increase of acute flexibility, stretching increase joint ROM. **AIM OF THE STUDY:** The aim of the study is to assess the effect of static stretching on shoulder flexibility among volleyball players. **METHOD:** 20 participants were recruited for the study and divided into two groups namely the control group and experimental group each consisting of 10 samples. Group A was given rom exercises and Group B was given static stretching. The outcome measures were measured using goniometer. **RESULT:** The result of the study proved that each group shows p value (p=0.001) however, Group B (Static stretching) shows more significant improvement than the group A (Controlled group) **CONCLUSION:** The study concluded that both groups showed significant improvement but Static stretching is more effective on shoulder flexibility among volleyball players.

INTRODUCTION

Shoulder flexibility and shoulder strength are very important to play volleyball. The major shoulder motion is the external/internal rotation for playing volleyball players. Shoulder flexibility is defined as the range of the hitting hand that may affect the power of the spike.

Shoulder flexibility refers to maximum momentum of joints movement, including static and dynamic. Shoulder flexibility is the normal form is considered among features healthy joint, but in over –flexibility is known as laxity (Jacobs & Jacobs,2004).Shoulder flexibility refers to ability of a perform in moving all or parts of his or her body in the broadest spectrum ,with no injuring to joints or muscles . Usually flexibility is shown in moving spectrum of specific muscle .

One of the principle roles of flexibility is preventing muscular and joint injuries while performing many of sport skills, studies confirm reduction of the muscular pain and injuries due to stretching exercise.

Muscle which experiences stretching exercise are of higher flexibility .These kinds of exercise prevent from muscular damages. Studies executed in 1981 concerning relation between stiffness of muscle and stable flexibility suggested that a relation exists between improper flexibility and muscular injuries. A very important objective of stretching before exercise is to improve muscle performance by increasing the range of motion and reducing the resistance to stretching which allows for a free movements during sports activities. The static stretching often results in increases in joint ROM

AIM OF THE STUDY

The aim of the study is to assess the effect of static stretching on shoulder flexibility among volleyball players.

RESEARCH DESIGN AND METHODOLOGY

An experimental study design was conducted with 20 samples, who fulfilled the inclusion and exclusion criteria.

Inclusion criteria

- Shoulder Flexibility
- Male volleyball players
- Age between 18 to 25

Exclusion criteria

- Fracture
- Soft tissue injury
- Neurological condition

- Tumors

Outcome Measures

ROM

Material Used:

- GONIOMETER
- Treatment Table
- Pen
- Paper

Procedure

The Experimental group consisting of 10 samples was given static stretching .

Following instructions given to the samples:

Doorway stretch

Step-1: Stand in a doorway with elbows and arms forming a 90 degree angle. Your feet should be in a split stands.

Step-2: Bring your right arm up to shoulder height and place your palm and forearm on the doorway

Step-3: Gently lean into the stretch, only going as far as comfortable

Step-4: Hold the stretch for up to 30secs .

Step-5: Change sides and repeat. Perform on each side 2_3 times.

Cross-arm stretch

Step-1: Stand with yours foot slightly less than shoulder with apart and bring your right arm upto a little less than shoulder height .

Step-2: place your left hand on your right below and gently your right arm across your body rising the left hand to support your arm

Step-3: hold this position for up to 30secs

Step-4: repeat on the opposite side

Step-5: do each side 3-5 times

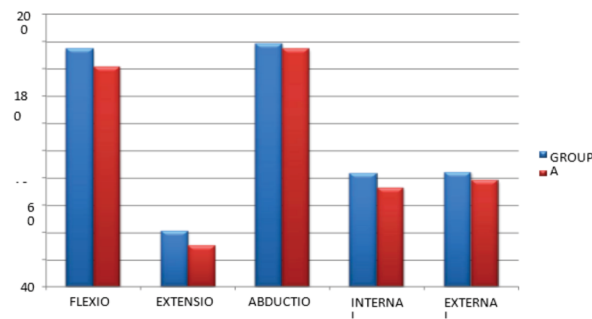
Sleeper stretch

Step-1: Lie on the affected side of your have no injuring or pain, choose a side to start with your shoulder should be stacked underneath you

Srep-2: bring your elbow straight out form your shoulder and bend this arm, so yours fingers are pointing toward the ceiling. This is the starting positing

Step-3: gently Gide this arm toward the floor using the unaffected arm. stop when you feet a stretch in back of you affected shoulder.

Statistical Analysis:



Graph : Comparing The Post Mean Values Of Group A And Group B

RESULT

The total score of the each group were analyzed which proved that the static stretching is effective on shoulder flexibility among volleyball players.

DISCUSSION

The study is to find the effectiveness of static stretching on shoulder flexibility among volleyball players. Goniometer is used as a outcome measure to find out flexion, extension, abduction, internal rotation and external rotation. The statically result of the study shows the significance difference between the pre and post test for group A&B. It shows that the experimental group is effective in improving the range of motion in the duration of week. From the mean value of flexion, extension, abduction, internal rotation &external rotation it is significantly improve the range of motion in the experimental group than the control group. Muh.ismail hafid (2020) et al , states that the static stretching is generally used by athletes and person who active in physical activity in since static stretching can increase the range of motion .

CONCLUSION

The study concluded that both groups showed significant improvement but however it is, static stretching is more effective than the control group among volleyball players

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