



Self-Directed Home Exercise Program Thrower's Ten

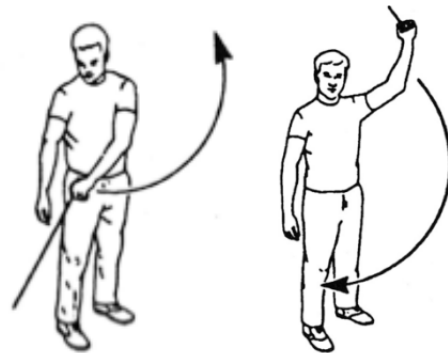
Introduction: This is a home exercise program for the painful throwing shoulder. The throwing motion requires a complex interaction of multiple muscle groups around the joint (rotator cuff), shoulder blade (scapula), and forearm. Strengthening the muscle groups individually can improve the dynamic (in-motion) function of the throwing shoulder and improve pain. These exercises should be performed in three sets of ten each. This exercise program has been adapted from the American Sports Medicine Institute in Birmingham, Alabama; this program and variations of it have been widely adopted among professional and competitive baseball players¹.

Modalities: It is recommended that heat and any anti-inflammatory medications be taken prior to exercises and ice after.

A. Diagonal Extension: Involved hand will grip tubing handle overhead and out to the side. Pull tubing down and across your body to the opposite side of leg. During the motion, lead with your thumb.

ONE

B. Diagonal Flexion: Gripping tubing handle in hand of involved arm, begin with arm out from the side and palm facing backward. After turning palm forward, proceed to flex elbow and bring arm up and over involved shoulder. Turn palm down and reverse to take arm to starting position.



TWO

A. External Rotation in Adduction: Stand with involved elbow fixed at side, elbow at 90 degrees and involved arm across front of body. Grip tubing handle while the other end of tubing is fixed. Pull out arm, keeping elbow at side. Return tubing slowly and controlled.





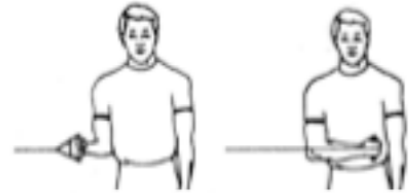
Thomas Obermeyer, M.D.



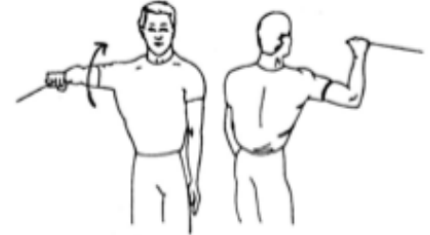
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TWO

B. Internal Rotation in Adduction: Standing with elbow at side fixed at 90 degrees and shoulder rotated out. Grip tubing handle while other end of tubing handle is fixed. Pull arm across body keeping the elbow at side. Return tubing slowly and controlled.



C. External Rotation in Abduction: Stand with shoulder abducted to 90 degrees. Grip tubing handle while the other end is fixed straight ahead, slightly lower than the shoulder. Keeping shoulder abducted, rotate shoulder back keeping elbow at 90 degrees. Return tubing and hand to starting position.



D. Internal Rotation in Abduction: Stand with shoulder abducted to 90 degrees, externally rotated 90 degrees and elbow bent. Keeping shoulder abducted, rotate shoulder forward, keeping elbow bent. Return tubing and hand to start position.



THREE

Shoulder abduction: Stand with arm at side, elbow straight, palm against side. Raise arm to the side, palm down, until arm reaches 90 degrees (shoulder level).



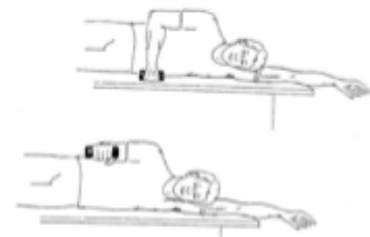
FOUR

Scaption, External Rotation: Stand with elbow straight and thumb up. Raise arm to shoulder level at 30 degree angle to the body. Do not go above shoulder height. Hold 2 seconds and lower slowly.



FIVE

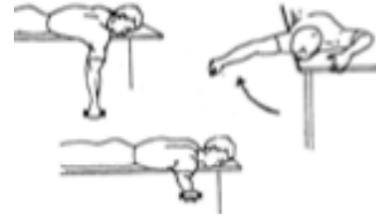
Sidelying External Rotation: Lie on uninvolved side, with involved arm at side of body and elbow bent. Keeping the elbow of involved arm fixed to side, raise arm. Hold two seconds and lower slowly.





SIX

A. Horizontal Abduction (Neutral): Lie on table, face down, with involved arm hanging straight to the floor, and palm facing down. Raise arm out to the side, parallel to the floor. Hold 2 seconds and lower slowly.



B. Prone Horizontal Abduction (Full ER, 100 degrees abduction): Lie on table face down, with involved arm hanging straight to the floor, and thumb rotated up (hitchhiker). Raise arm out to the side in front of shoulder, parallel to the floor.



C. Prone Rowing: Lying on your stomach with your involved arm hanging over the side of the table, dumbbell in hand and elbow straight. Slowly raise arm, bending elbow, and bring dumbbell as high as possible.



D. Prone Rowing into External Rotation: Lying on your stomach, slowly raise arm, bending elbow, up to the level of the table. Pause one second then rotate shoulder upward until dumbbell is even with table, keeping elbow bent.



SEVEN

Press Ups: Seated on a chair or table, place both hands firmly at the side with palms down and fingers pointed outwards. Hands should be placed equal to shoulders. Slowly push downward through the hands to elevate your body. Hold the elevated position for 2 seconds and lower slowly.



EIGHT

Push-ups: Start in the down position with arms in a comfortable position. Place hands no more than shoulder width apart. Push up as high as possible, rolling shoulders forward after elbows are straight. Start with a push-up into wall. Gradually progress to table top and eventually to floor as tolerable.





NINE

A. Elbow Flexion: Standing with arm against side and palm facing inward, bend elbow upward turning palm up as you progress. Hold 2 seconds and lower slowly.



B. Elbow Extension (Abduction): Raise involved arm overhead. Provide support at elbow from uninvolved hand. Straighten arm overhead. Hold two seconds and lower slowly.

TEN

A. Wrist Extension: Supporting the forearm with palm facing downward, raise weight in hand as far as possible. Hold two seconds and lower slowly.



B. Wrist flexion: Supporting the forearm with palm facing upward, lower a weight in hand as far as possible and then curl it up as far as possible. Hold for 2 seconds and then lower slowly.

C. Supination: Forearm supported on table with wrist in neutral position. Using a weight or hammer, roll wrist taking palm up. Hold for 2 seconds and return to starting position.



D. Pronation: Forearm supported on table with wrist in neutral position. Using a weight or hammer, roll wrist taking palm down. Hold for 2 seconds and return to starting position.

References

1. Wilk KE, Yenchak AJ, Arrigo CA, Andrews JR. The Advanced Throwers Ten Exercise Program: a new exercise series for enhanced dynamic shoulder control in the overhead throwing athlete. *Phys Sportsmed*. 2011 Nov;39(4):90-7. doi: 10.3810/psm.2011.11.1943. PMID: 22293772.