

A 63-year-male, injured in a motor vehicle accident at work one year prior was referred by his attorney to an industrial services PT clinic for FCE s/p left shoulder arthroscopic repair and biceps tenodesis for a partial rotator cuff tear. Surgery was followed by a 40-visit course of PT. The discharge report noted external rotation as: active T2, passive 65°. The outcome was unsatisfactory with reports of persistent pain at the anterior superior left shoulder and inadequate gains in functional capability needed to perform the essential job tasks after 40 physical therapy visits. He reports left little and ring finger numbness and left posterior thigh ache after 30 minutes sitting.

A prior work related injury to the left shoulder occurred 10 years earlier. At the time the left arm was suddenly jerked downward. He subsequently developed adhesive capsulitis and underwent surgical capsule release. He return to full duty full time at the Heavy category without restriction.

Comorbidities include type II diabetes and elevated blood pressure; injury-related persistent symptoms of PTSD with disturbed sleep for which he has undergone psychological treatment and uses self-care techniques with partial success. Medications include: edarbi 80 mg (BP), farxiga 10 mg (D2) sitagliptin 100 mg (D2), trazodone HCL 50 mg (m.depression), ibuprofen 800 mg prn (pain), aspirin 51 mg/d

FCE - Home Exercise Program Guide

Mr. _ below are exercises that seem to best fit with your current condition and goals. Take your time getting used to the program over the next weeks and months. Text or call if there are questions (443-xxx-xxxx). Keep in mind the numbness in your left 4th and 5th finger... if it worsens lighten up on the stretches and exercise that provoke.

If the left shoulder gets progressively more sore stop the exercises for 2 days and restart more gradually. On the last page there is additional information. The nutrition information may be helpful now. The Pavel video is informative about exercise form but the overhead lifting exercises should not be attempted for several months depending on your progress.



SHOULDER External Rotation Stretch for the Stiff and Sensitive Shoulder

Lie on your back with a firm cloth roll* across your upper back. (*folded and rolled pillow cases)

Place arms away from your body as shown, with elbow supported on a 3-in. pad (stack of books topped with towel will do).

Point your Left hand and forearm toward the ceiling, then rest the hand and wrist back away from the body on a block or small box about 6 inches high as shown. Adjust the support height so the shoulder is stretched but not painful. (Keep the elbow at a right angle).

In 5 minutes lower the support a little if you can without pain or increased numbness in your fingers.

Continue this stretch for 30-min session 2 - 3 times a day until your forearm is flat (horizontal).

During the stretch add in an isometric exercise... push your wrist and hand down into the block firmly for 5 seconds, rest 10 seconds and repeat for a set of 10. Repeat after 5 minutes.

Arm Behind the Back Stretch

Place the left hand behind the back with palm facing out.

Use the right to gently pull the left hand to the center and up the back to a gentle stretch.

Hold that position for 5 minutes.

If the left shoulder gets sore reduce the stretch a little and try another 5 min. If sore release the left arm from the back move the arm around for 1 minute then try again with a slightly easier stretch.

If the easy stretch is not irritating continue for 15 minutes.



Doorway Pole Exercises

Install a closet pole in a door at head-top height. (Install a second set of brackets at the top of the doorway for the hang stretch).

Grip the pole loosely and let the shoulder blades relax down your back.

Carefully pull down using your back muscles (the lats)

Hold a firm pull for 30 seconds, relax 10 and repeat for a set of 10. Set 5 min and repeat for 3 sets.

Repeat a second time in the day at least 6 hours latter.

Hang Stretch

Grip the pole at the height setting and use legs to lower your body until you feel to tolerable stretch for 30 seconds to 2 min. Rest and repeat once, once a day.





Seated Shoulder External Rotation Exercise

Sit back against a towel roll and rest the left elbow as shown.

Angle the forearm toward the right knee.

Lift a small weight (starting 2 lbs) to vertical for 30 reps if no pain, burning, fatigue or increased tingling. Rest 2 min and repeat. Wait 6 hours and repeat the 2 sets.

Continue daily at the level of no symptoms. After 3 days of no symptoms (pain, burning, fatigue, tingling) try increasing the weight a little. If symptoms ... go back in weight. If symptoms persist rest 2 days to illuminate symptoms ...then restart more slowly. *Note: ... better to reduce the weight than reduce the reps from 30.*

When you can do 5 lbs slowly for 30 reps clean of symptoms use a 16 oz water bottle with some water. Add a few ounces of water, reseal, then shake the bottle using the same motion. Gradually add water to half full over a week or 2.

From the vertical forearm position (picture 1 & 3) lift the arm from the table a little and return ... repeat for 5 reps. If no symptoms, lift a little higher and return. Repeat several days trying a little higher if no symptoms during the lift or afterwards. Slowly carefully progress the height.

Continue the exercise until you can lift 10 lbs overhead without symptoms.



Doorway Stretch

Hold your back flat up against the doorway.

Reach back overhead and touch the molding, then gradually work up the molding until you feel a light stretch.

Pause and breathe slowly into the diaphragm (like when you're preparing to fire a weapon).

After 3 cycles exhale fully and reach just a little further. Repeat breathing.

Rest after 3 reach cycles.

Repeat exercise twice a day until both arms reach all the way up easily and you can breathe freely there.



Countertop Stretch

Stand about 3 feet back with hands on counter.

Lift the sternum to flatten the upper back, then lower the torso through straight arms until you feel a good stretch ... hold and breathe into the diaphragm for several minutes. Come back to standing and repeat in 2 minutes.

On the 3rd set ... stretch as far down as you can then bend and straighten the elbows a little at first then deeper. Repeat bending and straightening 5 or 10 times. Come back to standing. Repeat for 3 sets.



Bird-dog Exercise

On all 4's lift the left arm slightly and extend the Right foot back (weight bearing on Right shoulder and Left knee)

Hold 5 seconds and reverse. (Return to start, then lift the Right hand and extend the Left foot (as shown).

Hold 5 - 10 seconds then reverse.

Repeat for 10 cycles once a day. Continue daily for 4 - 6 weeks.



Overhead stretch and Elbow Extension

Lie across a firm bed with space with your head near the edge.

Hold a dumbbell (10 lb) with both hands and reach toward the ceiling. Then slowly lower the weight overhead with elbows bent as shown.

Lower the weight with the elbows bent and in tight.

After 10 lift toward ceiling and lower cycles hold the stretch for 2 minutes. Repeat 10 lifts then rest 5 min.

Repeat the sequence once more.

Repeat the exercise in 6 hours.



RKC Arm Bar

Start on your back. Use 2 hands to lift a 10 lb kettlebell toward the ceiling.

Keep the arm vertical and pointed at the ceiling as you bring your left knee across the body and roll your left hip as far over as you can stretching the left shoulder.

Hold the positions 10 to 30 seconds.

Roll to your back keeping the arm vertical and lower the weight with both hands.

Repeat for 3 sets once a day.

ADDITIONAL INFORMATION

Advanced Exercise training

Pavel Video - Enter the KettleBell. Pavel is a master kettlebell trainer and a bit of a comic at times.

<https://www.youtube.com/watch?v=cKx8xE8jJZs>

Connective Tissue Adaptation - Nutrition supplement for support of connective tissue healing and strengthening.

Vit C each am.

15 grams gelatin one hour before exercise session of the target area.

Exercise the target area 5 to 10 min with heavy load (not maximum) 13 reps for 3 sets with a brief rest between sets seems optimal

Frequency - Exercise may be repeated in 6 hours (the biological process for rebuilding (collagen synthesis) is dormant for 6 hours after acute stimulation by exercise.

Another gelatin dose is beneficial one hour before the second exercise bout as well.)

Gelatin is available in capsules. One source is **Solgar Gelatin** 1680 mg (9 per dose), 250 Capsules Other sources; Great Lakes unflavored Gelatin. NaturesPlus Collagen Peptides

Diet information on YouTube:

Robert Lustig (author of Metabolical) with Rangan Chatterjee

<https://youtu.be/zXiQgTZZqPg>

Pradip Jamnadas https://www.youtube.com/watch?v=Is_x0LGNgC0

Mark Sisson, Metabolic Flexibility <https://youtu.be/yhulQ0XuAPM>