SHOULDER ARTHROSCOPY



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THE BASICS

This program is for rehabilitation following keyhole shoulder surgery. Shoulder arthroscopy is commonly performed for:

- Acromioplasty shaving of bone and bone spurs that can rub on tendons
- Subacromial decompression (SAD) shaving away shoulder bursitis
- AC joint surgery shaving of bone at the end of the clavicle or collar bone for a damaged AC joint
- · Capsular release for frozen shoulder or Arthritis

The common thing with all of these procedures is that nothing is being repaired or reconstructed. Therefore you do not need to worry about doing any damage with your rehab. We start stretching immediately after surgery but progress on to strengthening much quicker than we can with other procedures.

You can progress through the stages of this plan as rapidly your symptoms permit. I have provided rough guidelines for the duration of each stage. Use the "Guide to Progression" to help you decide when to move to the next stage. But remember the CO.RE motto – "you must progress for success".

GUIDE TO PROGRESSION

When do you move on to the next phase of your shoulder arthroscopy rehabilitation? Here are three guidelines:

1. The soreness guide

| SYMPTOMS | ACTION |
|--|--|
| Soreness before exercise due to previous days training | Take a day off, stay at current level |
| Soreness at the start of the exercise, relieved during the session | Stay at level, continue to exercise |
| No soreness during exercise session | Consider advancing to next level |

- 2. The functional guide if you have reached the goals for that particular phase as outlined in the rehabilitation program, you are ready to progress to the next level.
- **3.** The timeline progression estimated timeframes for each phase are included in the protocol.

So I advise that you use a combination of all three methods to make a best guess as to whether you are ready to progress.

Remember that you must **progress for success.**

THE FIRST WEEK

1. WOUND MANAGEMENT

Dressings applied in hospital generally do not need to be changed. They are waterproof. You can leave them in place until your post-operative wound check with the nurse at seven to ten days. Keep your wounds dry for the first week.

2. SWELLING

In the days immediately after surgery, the shoulder will be very swollen from the arthroscopic fluid. Regular application of ice will reduce swelling and help pain control. Some form of ice should be applied for fifteen to twenty minutes, at least three times a day. This can be as simple as a bag of frozen peas but there are newer devices such as a CryoCuff or Game Ready. If you have had an AC joint excision, you may get a very prominent round swelling at the top of the shoulder. It will resolve and usually not require treatment.

You will also get swelling in the hand and this can persist for weeks or months. The use of a squeeze ball will help pump fluid out of the hand and reduce swelling.

3. BRUISING

Arthroscopic shoulder surgery does involve shaving some of the bone and this will often produce significant bruising. Gravity will cause the blood to move downwards and it can be prominent in the pectoral region or down to the elbow crease. The bruising is not a cause for concern and will resolve over a few weeks.

4. SLING

The sling is provided for comfort only and should be worn as little as possible. Most people will wear the sling when outdoors for the first week only. You do not need to wear the sling around the house or at night at all.

5. HOW HARD DO I PUSH?

A bit of a nudge with the exercises is required. During the entire program, use these simple guides:

- a) Gritting your teeth is okay, but tears in the eyes is not.
- b) You must be able to do tomorrow what you did today. If you wake up so sore you need a rest day you did too much.
- c) A pain score of 3 out of 10 is okay, no more.

6. PHYSIOTHERAPY

This program is meant to be conducted under the supervision of a physiotherapist where possible. Physiotherapy review every two weeks is advisable in the initial three months.

7. DRIVING

It is not possible to drive while you are wearing a sling, both for legal reasons and for safety. Driving can usually resume after one week.

8. PAIN RELIEF

Shoulder surgery is definitely one of the more painful orthopaedic operations. Successful pain relief strategies require regular simple analgesics such as Panadol and anti-inflammatories. These will be topped up intermittently with stronger analgesics in the first week or two. Refer to Dr Colvin's guidelines "Pain relief after surgery".

STAGE ONE

DAYS ONE TO SEVEN

Following shoulder arthroscopy, we are aiming to regain full mobility in the shoulder as soon as possible. Stretching exercises start the day after surgery. Getting away to a good start at this stage can cut many months off your recovery. Conversely, a slow start and stiffness will set in even after a week or two.

It is all about the Big 3 - cradle pendulums, passive flexion, and passive external rotation. Most of the other exercises in this phase are for comfort or relief of muscle spasm.

Remember that the sling is to be worn for comfort only. Take it off as much as possible. Every exercise block in this program will start with some scapula (shoulder blade) strengthening. The shoulder blade floats on the rib cage, only held in place by muscles and ligaments. A stable scapula is a platform for normal shoulder function. It is said that a shoulder with a weak scapula is like firing a cannon from a canoe. The scapula stabilising muscles are the trapezius, rhomboids, and serratus anterior.

Objectives by the end of this stage

- 1. The passive range of motion targets are:
 - a) Forward flexion 135°
 - **b)** Abduction 90°
 - c) External rotation 30°

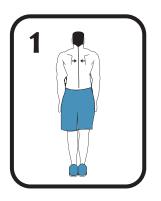
Your physiotherapist will measure these movements.

- **2.** The sling comes off
- **3.** You should have ceased narcotic painkillers.

 Manage your pain with regular Panadol, an anti-inflammatory, and possibly a short term sleeping tablet.

WEEKS ONE EXERCISES

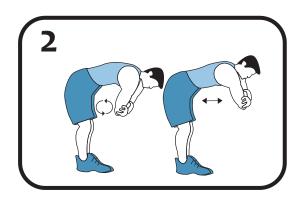
SCAPULA



1. Scapula setting

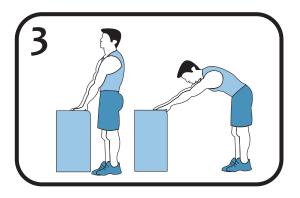
Pull the shoulders back and squeeze the shoulder blades together. Hold for 10 seconds. Repeat x3.

PASSIVE



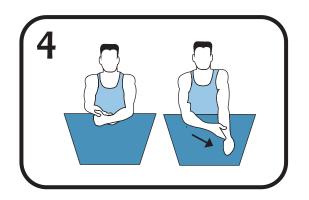
2. Cradle pendulums

Use your good arm to support the forearm and elbow of the sore arm. Lean well forward at the waist. Do 10 circles in each direction, then 10 movements back and forward as far as you can go. Repeat x3. The key to this exercise is to bend further at the waist and make the circles bigger and bigger as each week goes by. This is the core exercise for the program in the first 6 weeks. It is very safe and pushing harder will not do any damage. There is no upper limit to how much time you can spend doing this exercise.



3. Passive flexion table stretch

Place your hands on the edge of a table. Walk backwards until you gently feel the stretch. Don't be afraid to bend aggressively at the waist and step well back from the table as you progress. Hold for 30 seconds. Repeat x3.



4. Passive external rotation - seated

Sit with your arm resting on a pillow or table. Use your good hand to rotate the other arm outwards. Ensure you keep the elbow at your side. Hold for 30 seconds. Repeat x3.

OTHER



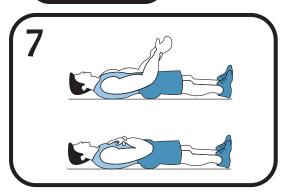
5. Squeeze ball

Use the squeeze ball throughout the day. This helps circulation in the hand and reduces swelling in the fingers.



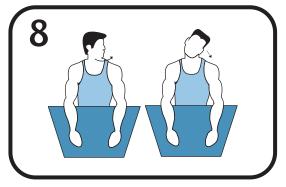
6. Wrist circles

Circle clockwise x10, and reverse direction. Repeat with a side-to-side motion instead of circles. Do this throughout the day.



7. Elbow flexion/extension

Lie flat on your back with your elbows support by a pillow. Use your good arm to assist bending and straightening the elbow. Repeat x10.



8. Neck stretches

Turn and look over your left shoulder for 10 seconds, repeat looking over your right shoulder. Then stretch to the side taking your ear towards your shoulder and hold for 10 seconds. Switch to the other side. Repeat regularly throughout the day.

ICE Po

STAGE TWO

WEEK TWO

The sling is off now and we will increase the stretching effort but also start some strength work with active assisted exercises. Three sessions per day is ideal.

You can do some light lifting at this stage as pain permits. It is also time to start some regular exercise with some walking or exercise bike.

Once the stitches have been removed and the wounds are dry, you can also start exercising in a pool. Walking breaststroke is a good way to get the shoulder moving in the pool.

Objectives by the end of this stage

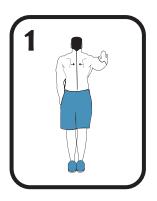
You should have near full range of motion with assistance.

- 1) Flexion 160°
- 2) Abduction 135°
- 3) External rotation 45°

Your physiotherapist will track your range of motion.

STAGE TWO EXERCISES

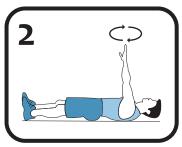
SCAPULA



1. Wall push

Lightly push your straight arm into the wall and squeeze the shoulder blades together. Note that you will need to assist your arm up to this position. Do not lift your operated arm under it's own power. Hold for 10 seconds. Repeat x3.

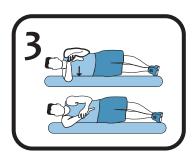
Repeat this drill with your arm at a higher point on the wall (above horizontal) and at a lower point on the wall (below horizontal).



2. Lying alphabet

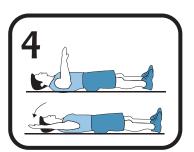
Lying on your back, use the opposite arm to assist your arm into a vertical position. Write the letters of the alphabet from A to Z in the air.

ACTIVE ASSISTED



3. Side lying internal rotation

Lie on your side with the operated shoulder down. The upper arm is directly out from your body. The forearm acts as a lever and you can use your good arm to push the forearm towards the bed. Stretch and hold for 10 seconds. Repeat x5.



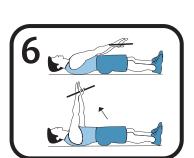
4. Supine external rotation

Lie on your back with your upper arm out at 90 degrees. Allow the forearm to fall backwards with gravity into a "stop sign" position. For a more forceful stretch, use your good arm to push down further. Stretch and hold for 10 seconds. Relax. Repeat x5.



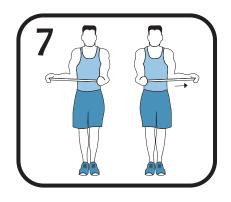
5. Walk fingers up wall - assisted flexion

Stand facing a wall and support your operated arm at the elbow with your fingertips on the wall. Walk your fingers up the wall until you feel the stretch. Hold for 10 seconds. Assist your arm to slide down the wall. Repeat x5.



6. Broomstick flexion - lying

Lying on your back, both hands hold a short piece of broomstick across the front of your thighs, your good arm assisting weak arm. Lift the arms straight up as far as possible. Hold for 10 seconds. Lower down. Repeat x5.



7. External rotation - broomstick

Start with your operated arm pointing straight ahead, elbow held firmly against the side. Use a short length of broomstick in the opposite arm and push the stick horizontally to turn the operated arm outwards. Ensure that the elbow stays by your side or the stretch is lost. Hold for 10 seconds and then relax. Repeat x5.

GENERAL



8. Walking



9. Exercise Bike

STAGE THREE

WEEKS THREE AND FOUR

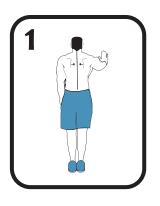
At this stage we can increase the scapula strengthening exercises remembering that good scapula strength is the key to good shoulder function.

The other major progression at this stage is the addition of isometric strengthening. Isometric exercise involves contraction of a muscle without producing any movement of a joint.

Try to find time for three sessions a day.

STAGE THREE EXERCISES

SCAPULA



1. Wall push

Lightly push your straight arm into the wall and squeeze the shoulder blades together. Note that you will need to assist your arm up to this position. Do not lift your operated arm under it's own power. Hold for 10 seconds. Repeat x3.

Repeat this drill with your arm at a higher point on the wall (above horizontal) and at a lower point on the wall (below horizontal).





Lying on your back, use the opposite arm to assist your arm into a vertical position. Write the letters of the alphabet from A to Z in the air.

3. Roll ball on wall



Stand facing a wall and use your arm to push a light ball into the wall. Roll the ball in clockwise then anti-clockwise circles for 1 minute. Repeat.

PASSIVE



4. Internal rotation stretch

Stand upright. Hold a towel in both hands behind your back. The lower hand is the shoulder being stretched. Use your good arm at the top to pull the affected arm up behind your back. Stretch and hold for 10 seconds. Relax. Repeat x3.



5. External rotation stretch

Stand in a doorway with your elbow by your side, palm on the doorway. Use your good hand to hold the elbow firmly against the body as you twist the hips for a forceful rotation of the arm outwards. Stretch, hold for 10 seconds, and relax. Repeat x3.



6. Stretch posterior capsule

Standing, bring your arm across the body horizontally. Use the good hand over the elbow to push the arm closer to your chest. Hold for 10 seconds and relax. Repeat x3. Note - this is a very important shoulder stretch. Do it frequently.

ACTIVE ASSISTED



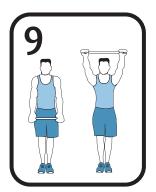
7. Walk fingers up wall - unassisted

Stand facing a wall. Start with your hand below horizontal. Walk the fingers up the wall as far as possible and hold the stretch at the top for 10 seconds. Lower your arm back to the starting position by dragging the fingers against the wall. Use as little resistance on the wall as possible to recruit deltoid muscle strength. Repeat x5.



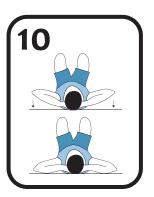
8. Walk fingers up wall - abduction

Stand side on to a wall. Walk the fingers starting down low up to a point where you feel the stretch. Hold for 10 seconds. Drag the arm down the wall using finger pressure resistance to stop the arm falling. Use as little resistance as necessary. This will start your deltoid muscle working. Repeat x5.



9. Standing broomstick flexion

Start with your arms down, shoulder width apart holding a short length of broomstick. Raise both arms up as far as possible, stronger arm assisting weaker arm. Pause at the top and then lower back down. Repeat x5.



10. Butterfly exercise

Lie on your back, hands behind your head. Push the elbows down towards the bed as far as possible. Pause and lift the elbows up. Repeat 3 sets of 5.

ISOMETRICS

Isometrics are a good way to start some strength work at this phase, if you have time to do additional exercise.



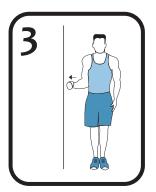
1. Isometric flexion

Stand facing a wall. Push your fist forwards into the wall. Hold for 10 seconds. Repeat x3.



2. Isometric extension

Stand with your back to a wall. Push your elbow backwards into the wall. Hold for 10 seconds. Repeat x3.



3. Isometric abduction

Stand side on to a wall. Push the outside of your forearm against the wall. Hold for 10 seconds. Repeat x3.



4. Isometric adduction

Use your elbow to hold a rolled up towel against your body. Squeeze for 10 seconds. Relax. Repeat x3.



5. Isometric external rotation

Stand in an open doorway with the outside of your wrist against the frame. Keep your elbow by your side. Push the wrist outwards. Hold for 10 seconds, then relax. Repeat x3.



6. Isometric internal rotation

Stand in an open doorway. Put your palm against the doorway and keep your elbow by your side. Push inwards for 10 seconds and relax. Repeat x3.

STAGE FOUR

WEEKS FIVE TO EIGHT

The progression of strengthening is the introduction of therabands. Remember that the exact time for progression will vary from one person to the next. Refer back to the "Guide to Progression" to decide whether you are ready to move on to the next stage.

Note that shoulder therabands progress by colour:

Band Strengths

Yellow - Easy

Red - Light

🔵 Green - Medium

Blue - Hard

Objectives by the end of this stage

By the end of this phase you should have almost full active range of motion.

- 1) Flexion 170°
- 2) Abduction 170°
- 3) External rotation same as normal arm

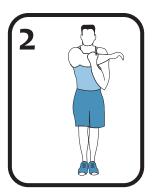
STAGE FOUR EXERCISES

STRETCH



1. Trapezius

Stand upright, take your uninjured ann over the top of your head and use it to pull your head to the side. Feel the stretch in the trapezius, hold for 10 seconds and relax. Repeat x3.



2. Posterior deltoid/capsule

Standing, bring your arm across the body horizontally. Use the good hand over the elbow to push the arm closer to your chest. Hold for 10 seconds and relax. Repeat x3. Note - this is a very important shoulder stretch. Do it frequently.



3. Triceps

Lift your arm and then place your palm between the shoulder blades. Use your unaffected hand to pull the elbow to point directly at the ceiling. Hold for 10 seconds and then relax. Repeat x3.



4. Lat dorsi

Interlock your hands and push the palms directly up towards the ceiling as far as possible. Hold for 10 seconds, then relax. Repeat x3.



5. Rhomboids

Interlock your hands and push the palms out forward in front of you. Hold for 10 seconds, then relax. Repeat x3.



6. Lower pecs

Interlock your hands behind your back. Lift the hands up away from your back, hold for 10 seconds and relax. Repeat x3.



7. Stop sign

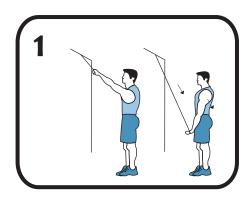
Attach the theraband to the top of a door, and stand with your back to the door. Place your hand in a stop sign position with the elbow bent 90 degrees. Push your hand horizontally forward until the arm is straight, pause and return to the start. Repeat x 10.



8. Doorway ER

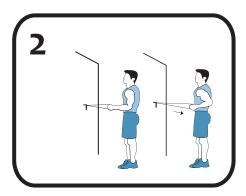
Stand in a doorway with your elbow by your side, palm on the doorway. Use your good hand to hold the elbow firmly against the body as you twist the hips for a forceful rotation of the ann outwards. Stretch, hold for 10 seconds, and relax. Repeat x3.

STRENGTHEN - THERABANDS



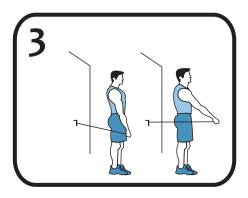
1. Pull downs

Attach the band to an elevated point like the top of a door. Start by facing the attachment point with your arm outstretched. Keep the arm straight and pull down until your hand is at the front of your thigh, pause and return back up. Repeat x10.



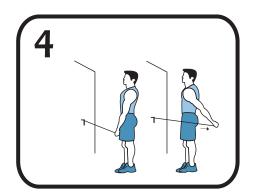
2. Theraband standing row

Attach the band to a door handle. Stand facing the attachment point with your hands outstretched, elbows at your side. Pull until your hands reach your belly button. Pause, then return to start position. Repeat x10.



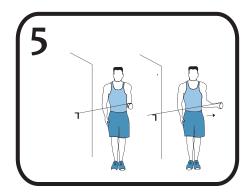
3. Theraband flexion

Attach the band to a door handle. Stand with your back to the attachment point, hand by your side. With a straight arm, reach forward, coming almost to the horizontal position if possible. Pause and return to the start position. Repeat x10.



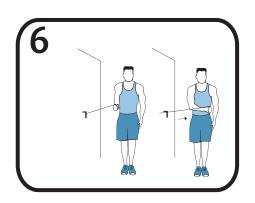
4. Theraband extension

Attach the band to a door handle. Stand facing the attachment point with your hand by your side. Push a straight arm backwards as far as you can, pause, and return to start position. Repeat x10.



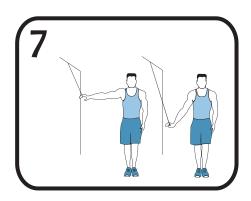
5. Theraband external rotation - "open the gate"

Stand side on to the door with your injured side away from the door. Hold the band with your elbow by your side and bent at 90 degrees. Rotate the arm outwards as if you are "opening the gate". Return to neutral. Repeat x10.



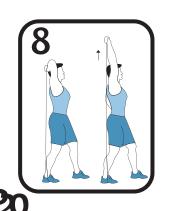
6. Theraband internal rotation - "close the gate"

Attach the band to a door handle. Stand side on to the door with your injured shoulder closest to the door. Keep your elbow at the side and bent 90 degrees. From the straight-forward position, rotate the hand inwards towards your belly button. You pull the theraband across your body in a "closing the gate" motion. Return to neutral. Repeat x10.



7. Theraband adduction

Attach the band to an elevated point like the top of a door. Stand side on. Start with the arm elevated. Keeping the arm straight, pull the hand down to your thigh. Pause and return back to the start position. Repeat x10.



8. Theraband triceps

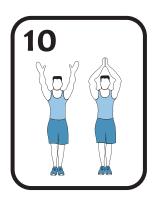
Fix the theraband at the back of your heel. Hold the other end in one hand behind your head. Extend the elbow vertically until the arm is fully straight. Return to the start position. Repeat x10.



9. Theraband biceps

Fix the theraband around your forefoot. Hold the band with your hand by your side. Start with your hand by your side. Bend the elbow as far as possible, pause and return to the start position. Repeat x10.

STRENGTHEN - ACTIVE



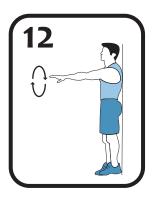
10. Overhead hand claps

Start with your hands by your sides. Lift the arms directly sideways into an overhead clap. Return to the start position. Repeat 3 sets x10.



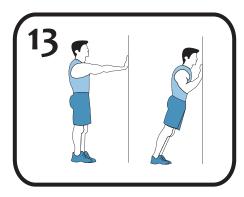
11. Empty can exercise

The start position is similar to emptying a can of soft drink. The thumb is pointing to the ground with the arm held out. The arm is neither directly sideways nor directly forwards, but approximately midway between these 2 points. Lift the arm up, pause then lower. Repeat x10. Do 3 sets



12. Standing alphabets

Stand with your back against the wall, arm out horizontal. Set the scapula by pulling the shoulder blades together. Draw the letters of the alphabet in the air.



13. Wall push ups

Stand upright facing a wall, arms out straight against a wall. Bend the elbow and lean towards the wall until your nose touches the wall. Push back to vertical. Repeat x10.

STAGE FIVE

WEEK NINE ONWARDS

At this stage, we can progress with some serious strength building using dumbbells.

The key elements of the program at this stage are:

- 1) Continue Stage 4 Stretches
- 2) Dumbbells can replace most of the theraband exercises.
- 3) The classic body weight exercises commence push-ups and triceps dips.
- 4) Compound theraband exercises.

Objectives by the end of this stage

Return to sport and manual occupations. This will be somewhere between three and six months post surgery.

STAGE FIVE EXERCISES DUMBELLS



1. Bent over rowing

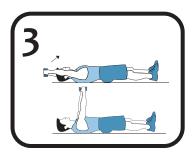
Lean forward with your resting hand on a table or chair. Bend aggressively at the hips. Your arm hangs down holding the dumbbell. Raise your elbow up straight as high as you can, squeezing the shoulder blades together. Pause, then lower. Repeat x10.



2. Standing alphabets

Stand with your back against the wall. Set the shoulder blades by squeezing them together. Holding a light dumbbell with your arm out horizontal, draw the letters of the alphabet from A to Z. Or do small circles in both directions.

3. Pull overs



Lying flat, hold a single dumbbell in both hands above your head. Keeping the arms straight. The arms "pull over" to a vertical position. Pause, then return to start. Repeat x10.

4. Lying flexion



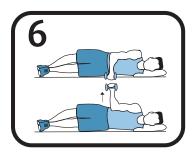
Lying on your back, hold a single dumbbell in 2 hands on the front of your thighs. Lift the arm straight up to a vertical position, pause then return to start. Repeat x10.

5. Standing flexion



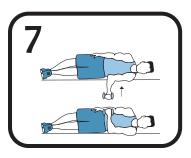
Start with your arms at the side holding a pair of dumbbells. Raise one arm forward with a straight elbow. Lift up until it is directly over your head. Pause then lower back to the start position. Repeat x10.

6. External rotation

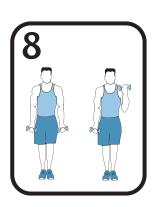


Lie on your side with the injured shoulder uppermost. Rest the dumbbell in front of you with elbow bent 90 degrees. Keeping the elbow at your side, rotate the arm outwards with an "open the gate" motion. Pause, then return to the start. Repeat x10.

7. Internal rotation



Lie on your side with the injured shoulder down. Rest the dumbbell in your hand with the elbow bent 90 degrees. Keeping the arm at your side, rotate the forearm upwards in a "close the gate" action. Pause at the top then lower back slowly. Repeat x10.



8. Biceps

Stand with the arms by your side, dumbbell in each hand. Alternate arm curls bending at the elbow to bring the dumbbell up to your shoulder. Return to the start position. Repeat x10.



9. Triceps

Start with your hand holding a dumbbell behind your head. Support the elbow with your opposite hand if necessary. Straighten the elbow until the hand is directly above your head. Pause and return to the start position. Repeat x10.

BODY WEIGHT EXERCISES



10. Push ups - knees

With your hands slightly wider than the shoulders, do a push up pivoting on the knees. Go as low to the ground as possible and keep knees, hips, shoulders and head aligned throughout. Return to the top. Repeat x10.



11. Push ups - full

Start with your hands slightly wider than the shoulders, weight balanced on your toes. Keep your ankles, hips, shoulders and head aligned throughout the exercise. Lower your nose to the ground, pause and return up. Repeat x10.

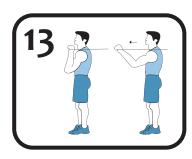


12. Triceps dips

Support your weight with your hands holding the leading edge of a chair or bench behind you. Feet out in front. Lower your bottom towards the ground as far as strength permits, pause and then push back up. As you get stronger, move the feet further away from the support. Repeat x10.

COMPOUND THERABANDS

13. Theraband stop sign



Attach the theraband to the top of a door, and stand with your back to the door. Place your hand in a stop sign position with the elbow bent 90 degrees. Push your hand horizontally forward until the arm is straight, pause and return to the start. Repeat x10.

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14. Theraband D1 pattern

Secure the theraband around your forefoot. Stand with your arm down, theraband in the hand on the same side. Bring your arm diagonally across your body as far as possible, pause and return to the start. Repeat x10.

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15. Theraband D2 pattern

Secure the theraband around your forefoot. Your opposite hand is by your side holding the theraband. Bring your arm up and out into the stop sign position. Pause and return to the start. Repeat x10.

FREQUENTLY ASKED QUESTIONS

1. When does shoulder bursitis require surgery?

Most patients should try non-operative treatment for a minimum of three to six months before considering surgery for shoulder bursitis. The non-operative treatment involves anti-inflammatory tablets, cortisone injections, and a rotator cuff stretch and strengthen program supervised by the physiotherapist.

Surgery might be considered sooner if there is a large bone spur.

2. What rehabilitation do I require following arthroscopic shoulder surgery?

You will be seen by the hospital physiotherapist one day after surgery and given exercises for the first week. This program outlines the rehabilitation exercises to be undertaken. It is desirable to have physio supervision on a fortnightly basis in the early months.

3. How long do I need to wear a sling?

A sling is worn for comfort for the first week only. It can be removed as soon as symptoms allow.

4. How soon can I drive after surgery?

It is usually safe to drive one to two weeks after shoulder arthroscopy surgery.

5. When can I return to work after shoulder arthroscopy?

You will require at least one week off work completely. Office and supervisory duties can start one to two weeks after surgery depending on pain levels. Light lifting is permissible after one month and heavier lifting after two months. For manual occupations it may be up to three months for unrestricted activities.

6. When can I play sport after shoulder arthroscopy?

- Running
 - o 4 weeks
- Swimming
 - o Walking breaststroke 2 weeks
 - o Breaststroke 4 weeks
 - o Freestyle 3 months
- · Golf
- o Chip and putt 4 weeks
- o Irons on practice range 8 weeks
- o Normal play 12 weeks
- Tennis
 - o Social doubles 12 weeks

POST-OPERATIVE PROBLEMS

1. Stiffness and frozen shoulder

There are two ways frozen shoulder can develop:

- Failure to get the shoulder moving early with the stretching exercises. It is critical that you undertake these exercises right from day one and that you progress them to an ever increasing range of motion. This is the commonest cause of frozen shoulder following surgery.
- Some people do all the right things and still get a frozen shoulder. There
 may be underlying biologic reasons why they have a tendency to form
 more scar tissue than others.

Frozen shoulder almost always resolves but can extend the recovery period from surgery. There are some things that can be done for frozen shoulder including cortisone injections into the shoulder joint starting three months post surgery.

2. Tingling and numbness in the hand

There are several possible causes of temporary tingling and numbness in the hand and arm after surgery. Nerves to the arm may be irritated at the neck, or as they run under the collarbone (thoracic outlet syndrome), or due to swelling at the elbow or wrist (carpel tunnel syndrome). Compression at the elbow can also be caused by the sling. All of these things are usually temporary. Shoulder arthroscopy does not usually endanger any nerves. The main nerves to the arm are under the shoulder and the surgery is done on top of the shoulder.

3. Clicking or catching in the shoulder

There are many possible causes for these symptoms including clicking from the scapular region or from the rotator cuff tendons. It generally resolves over an extended period of time as the tendon heals. Painless clicking in the longer term does not require treatment.

SHOULDER TERMINOLOGY

ABDUCTION The action of lifting your arm up to the side

away from your body.

A movement initiated by your own muscles. This movement will build strength. **ACTIVE**

The action of moving your arm towards your **ADDUCTION**

body from the side.

Contracting and shortening a muscle (the usual CONCENTRIC

form of exercise).

Contraction while lengthening a muscle (a con-**EXCENTRIC**

trolled release).

EXTENSION The action of moving your arm backwards be-

hind your body.

The action of rotating your arm and hand away from your body outwards. **EXTERNAL ROTATION**

The action of moving your arm forward away from your body and up over your head. **FLEXION**

INTERNAL ROTATION The action of rotating your hand towards your body and then behind your back.

ISOMETRIC Contracting muscle without shortening it (ie. no

movement of the joint).

PASSIVE A movement initiated by external forces, a

stretching exercise.

PRONE Lying on your abdomen.

How far you can move a joint in any one direc-**RANGE OF MOTION**

tion (measured in degrees).

SUPINE Lying on your back.