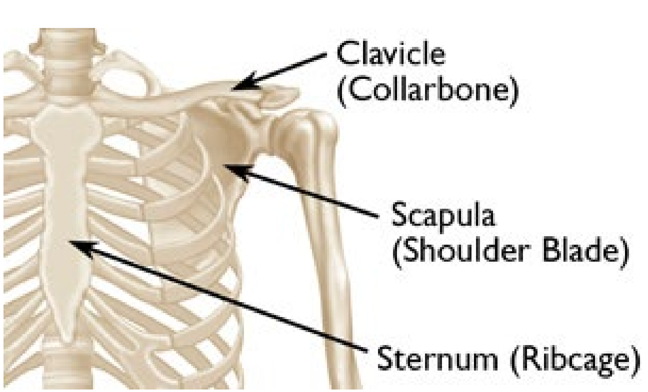
Clavicle fracture open reduction internal fixation (ORIF) advice and exercises

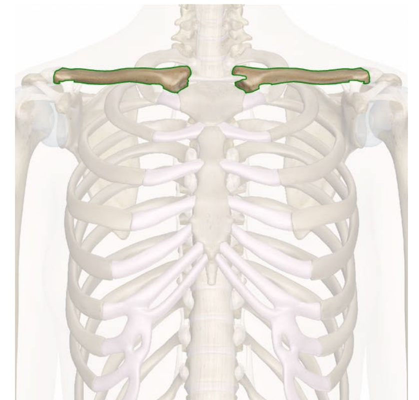
This information gives advice and exercises to help you get back to full fitness as quickly as possible after your operation.
Before you leave hospital a physiotherapist will teach you all the exercises in this leaflet and make sure that you do not have any problems.

Why do I need this operation?

Your clavicle (collarbone) is a long thin bone that runs across the top of the shoulder (sitting in the middle of your shoulder blade at the back and sternum at the front). The main role of the clavicle is to provide structural reinforcement to the shoulder, by helping transfer load and weight forces from the arm and it also contributes to shoulder stability when reaching your arm above the head.

The clavicle is usually fractured by a direct force or trauma, for example falling onto the front of the shoulder. Depending on the location and nature of the fracture, sometimes it can be treated without an operation. However, in other cases, it may be necessary to have surgery to stabilise the bone with plates/screws/wire to scaffold the bone together, so the fracture can heal well.





What is an open reduction internal fixation (ORIF)?

The surgeon will re-align the broken bones of your clavicle (reduction) through an incision in your skin. The two bone ends are then secured to each other (fixation), which can involve screws, metal plates, wires or pins. Finally, the surgeon will make any other necessary repairs and ensure your shoulder's stability, before closing the wound.

General guidelines

Pain: A nerve block may be used during the procedure, which means that immediately after the operation the shoulder and arm can feel numb for a few hours, or sometimes the rest of the day. The shoulder is likely to be sore when this wears off and this usually lasts for at least the first few weeks. It is important that you continue to take the painkillers as advised by the hospital, to ensure you are as comfortable as possible. If you have any problems with the painkillers or find

the ones you have been given are not effective, you will need to contact your GP for advice. If you run out and need additional quantities, also consult your GP regarding this.

Ice packs may also help reduce the pain; you can do this by wrapping frozen peas / crushed ice in a damp, cold tea towel and placing it on the shoulder for up to 10 minutes at a time, making sure the wound is covered with something waterproof, e.g. cling-film until healed. You can repeat this as many times as needed throughout the day, but allow at least 30 minutes between each ice pack.

Wearing a sling: You will return from theatre wearing a sling; this is worn for three weeks but you will be advised by your physiotherapist when to stop using it. The sling needs to be worn both day and night, therefore initially you will only remove the sling for specific exercises and to wash / dress. It can be worn over the top of clothing, to allow you to dress normally. The physiotherapist will advise you of how to loosen the sling for the exercises and the easiest way to self-care.

Hygiene: You are likely to need assistance to wash and dress, so it is advisable to try to organise some help from family and friends prior to admission. The easiest way to self-care will be shown to you in the post-op shoulder group.

The wound

The scar will usually follow the line of the clavicle bone (horizontally). The stitches are dissolvable but are usually trimmed after 10-14 days. Keep the wound dry until it is closed (fully scabbed over). The wound will be covered with a waterproof dressing and this should remain on until you see your practice nurse, unless advised otherwise.

If the wound changes in appearance, weeps fluid or pus or you feel unwell with a high temperature, contact your GP as soon as possible as you may have an infection.

Follow-up appointment

You may be booked into the 11am ‘post-op’ shoulder group at the Royal Berkshire Hospital on the first Friday following your surgery; this is for a wound check and to make sure you are comfortable and understand your exercises. Following this a referral will then be forwarded to your local physiotherapy department for further rehabilitation around three weeks after the operation. Alternatively, you may be booked straight into a physio appointment at three weeks.

You will also be reviewed in the Shoulder (Orthopaedic) Clinic and have an x-ray on arrival. This usually happens six weeks after the operation, but can sometimes vary for individual cases.

Exercises

Throughout your rehabilitation you must always be guided by your pain and it is highly likely you will find you are more tired than usual initially. It is important to ensure you adopt a sensible balance between activity and rest.

Do not force the shoulder into positions of high resistance or pain.

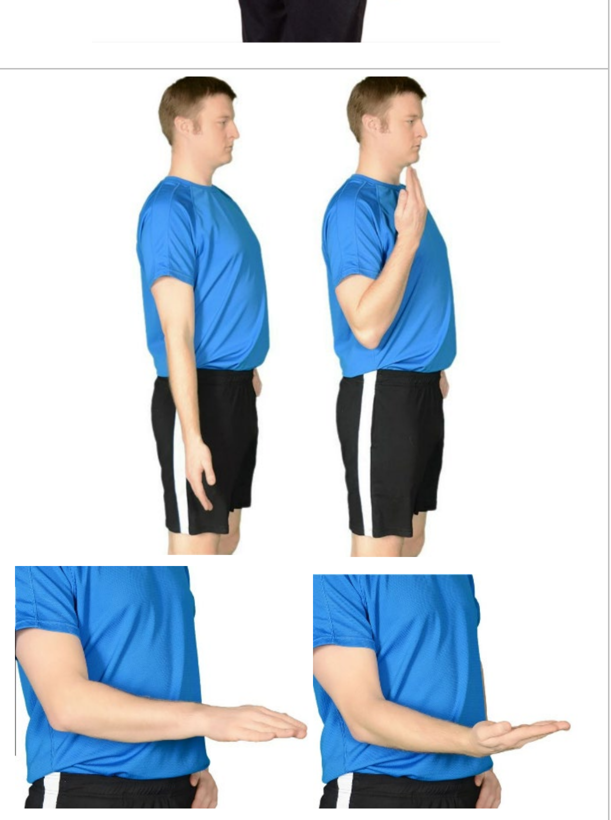
Try to do the exercises little and often, spread throughout the day, as you are likely to find this easier and more tolerable than sustained (long) exercise sessions, e.g. x 5-10 reps of an

exercise. Try to ensure you do all the (appropriate) exercises at least a few times a day.

Perseverance is key, rehabilitation after a fracture fixation usually takes between 6-12 months but in some cases it may take longer. We understand this may sounds like a long time, but your Physiotherapist can explain why this is a normal expectation.

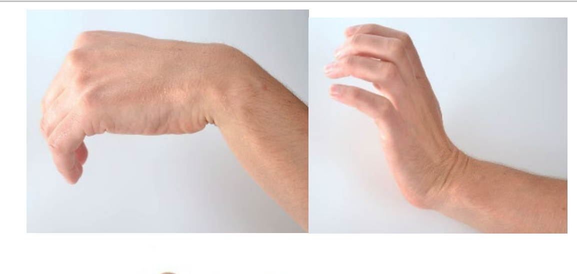
Note: You need to avoid bringing the arm across the body (adduction movement of the shoulder) for a minimum of 3 weeks.

0 – 3 weeks

Postural awareness: • Standing or sitting – Pull the shoulder blades gently back and down, with the chest bone (sternum) naturally coming forwards, as if taking a deep breath in.	
Elbow exercises: • Standing – Bend and straighten the elbow fully, using your good arm to assist if needed. • Standing or sitting – With a bent elbow turn the forearm over in a clockwise and anti-clockwise direction (palm up, then palm down).	

Wrist and hand exercises:

- Bend the wrist forwards and backwards, then side to side.
- Circle the wrist in a clockwise and then in an anticlockwise direction.
- Squeeze and make a fist. You can use a small ball if you have one.



Begin assisted shoulder movement:

- Sitting or standing –
  Use the good arm to support the operated arm and gently lift the operated arm up away from the body, **only to shoulder height**.
- Sitting at a table –
  Put a cloth or small ball underneath the operated arm (hand).
- Gently slide the operated arm away from the body, using the table to take the full weight of the arm.
- **Do not** lean your body forward into the table.

• Lying on your back – Using the good arm to assist (to do most of the lifting), help the operated arm up to a vertical position. • **Do not** go any further than vertical.	
• Standing or sitting – Tucking your bent elbow into your side, turn your arm away from your body unassisted. • **Do not** force or stretch this movement – go as far as comfortable/ able **only**.	

3-6 weeks

Begin the following exercises as pain allows, but it is very important that **you do not lift the arm above shoulder height**.

• Standing or sitting – Lift the operated arm forward and up in front of you, **to shoulder height** unassisted.	

• Standing – Lift the operated arm unassisted away from the body and out to the side no further than shoulder height.	
• Standing or sitting – Tucking your bent elbow into your side, turn your arm away from your body unassisted. • Try to go a bit further every time you do it.	
• Standing – Put the operated arm behind your back at the bottom. • Using a towel, pull the operated arm slowly up your back, using the good arm at the top.	
• Continue table slides (as on page 4). • **Do not** lean your body forward into the table.	

6 weeks onwards

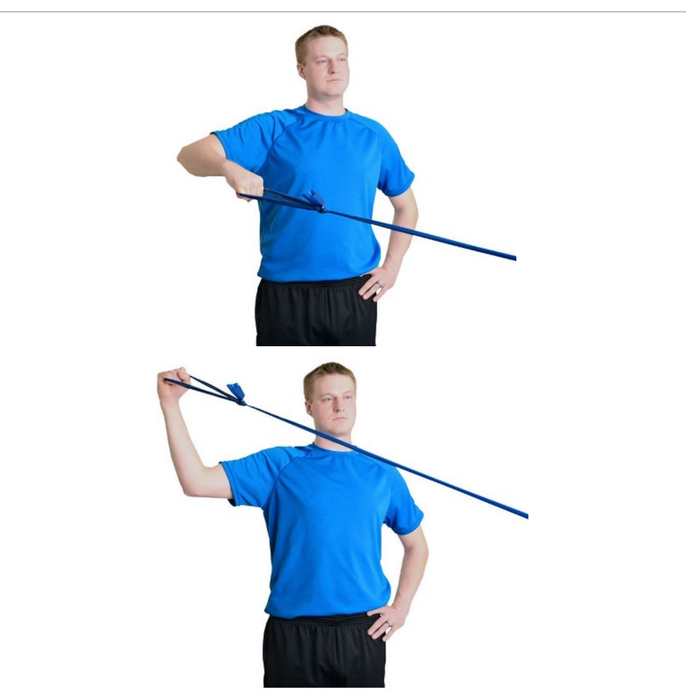
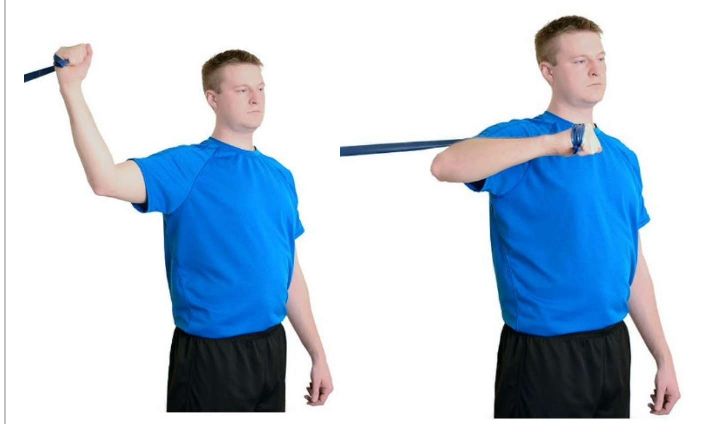
You can now start movements above shoulder height.

• Lying on your back – Lift the operated arm up and over your head.	
• Standing – • Lift the operated arm upwards to a vertical position.	
• Standing – Holding a stick in both hands; slowly use the good hand to push the operated arm out to the side and away from the body. • Slowly encourage the arm to go all the way up	
• Standing – Facing a wall, start by gently pushing your forearms into the wall at all times. • Slowly slide your hands up in a 'Y' shape direction	

• Standing – Holding a stick or mop in both hands. Keeping both elbows tucked in against your side at all times, use the good arm to gently push the operated arm away from the body. It should rotate away from the body – not lift directly outwards.	
• Standing – Put the operated arm resting against a wall or doorframe and gently lean forward away from the wall/ door frame, stretching the chest and front part of the shoulder.	
• Sitting at a table – Put a cloth or small ball underneath the operated arm (hand). • Gently slide the operated arm away from the body, using the ball to take some weight of the arm and lean your body forward into the table.	
• Standing – Arm at your side, elbow bent to 90 degrees. • Stand with your back to the wall and push your elbow backwards against the doorframe.	

• Standing – Have your arm at your side, elbow bent to 90 degrees. • Stand next to the wall and push your hand against the doorframe as if you are turning the arm outwards.	
• Standing – Place both hands on a table or kitchen work surface and gently lean onto the hands, putting weight through both arms. • Slowly increase the amount of weight through the arms as able, but avoid bending the elbows or leaning your body towards the surface.	
• Standing – Start by holding a resistance band in both hands and keep your elbows tucked into your waist to start. • Pull your hands apart to tension the band, then keeping that tension on the band slowly lift your arms upwards as far as you can.	

Harder exercises

• Standing – Tie a resistance band to a static (stable) object at one end and hold the band in the operated hand at the other end. • Start with your elbow bent, arm out to the side at shoulder height and forearm parallel to the floor. Slowly rotate your hand / forearm backwards, and up towards the ceiling (pulling against the band as you do). • Return to the starting position.	
• Standing – Tie a resistance band to a static (stable) object at one end and hold the band in the operated hand at the other end. • Start with your elbow bent, arm out to the side at shoulder height and forearm pointing up towards the ceiling. • Slowly rotate your hand/ forearm down towards the floor (pulling against the band as you do). • Return to starting position.	
• Standing – Lift your operated arm straight in front of you to shoulder height. • Roll a ball in different directions along the wall.	

• Standing – Place both hands on a cushion/ pillow or a wobble cushion, either keeling on the floor, or standing at a kitchen work surface/ table. Lean onto your hands, putting weight through both arms. • If this is easy, try balancing through only the operated arm (lift the good arm off the surface) and lean your body over the cushion. • The more uneven or 'wobbly' the surface you are leaning through, the harder it is.	
• Kneeling on the floor – Keeping your knees bent and on the floor, try to do a press up (bend both elbows). Go as far as comfortable, and slowly increase the depth as able.	
• Kneeling on the floor – Slowly lift one arm off the floor up in front of you and then straighten the opposite leg out behind you. • (Don't lift the arm and leg on the same side, it should always be the opposites!)	
• Standing – Facing a table or kitchen worktop, reach both hands as far as you can away from your body. Keeping your hands in the same place, slowly walk your feet backwards and bend at your hips.	

Images courtesy of http://simpleset.net

Resuming normal activities

Timings for returning to functional activities are approximate and will differ depending upon the individual. However, the earliest that these activities may commence are:

- **Driving:** you may return to driving at 4 weeks if you feel competent / safe to do so.
- **Lifting:** heavy lifting should not resume until at least three months post-op.
- **Swimming:** breast stroke can be started at 6-8 weeks but front crawl should be left for 3 months.
- **Golf**: from 3 months.
- **Contact sport:** from 3-6 months (football, rugby, horse riding, racquet sports), but may be at consultant's discretion.
- **Return to work:** light duties (desk based) from 2 weeks, heavier duties from 3 months. If you have a manual job, you should be guided by your consultant at your follow-up appointment.

Note: These are guidelines only. Please ask your physiotherapist or consultant for individual advice.

Contact us

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For questions or concerns please contact:

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Please ask if you need this information in another language or format.

RBFT Physiotherapy Department.
Reviewed: June 2023.
Review due: June 2025