



EQUILIBRIUM SPORTS & SPINAL

SHOULDER PAIN

A COMPREHENSIVE GUIDE TO SHOULDER PAIN AND
REHABILITATION





Did you know, our shoulder is one of our most flexible joints. It is one of the only joints that can move through a full 360 degree arc. It's no wonder then, that it is one of the most commonly injured joints in the body.

INTRO

Shoulder pain is a frequent complaint that can present in a number of different ways. There can be significant limitations caused by shoulder pain. Or low-grade discomfort that lingers for days on end. Others may experience more sporadic episodes of discomfort that come and go, but are no less limiting in their daily lives.

One of the reasons shoulders can create a number of different uncomfortable sensations is because it is a highly mobile joint. Lots of mobility in the shoulder is a good thing - in principle - but the high mobility also creates demand for control and stability of the joint as well. When this balance is out of equilibrium we see problems arise.

This Guide aims to make the highly complex shoulder girdle as simple as possible. You will learn:

- A general perspective on what parts of the shoulder tend to hurt.
- The steps to take to get the shoulder moving again
- Specific range of motions activities.
- And finally strengthening exercises harnessing control of the mobile shoulder to avoid further discomfort and potential injury.

One more important note: there are so many unique ways shoulders can have issues that we strongly recommend getting an assessment from a qualified healthcare professional if you are going to address lingering issues or painful complaints. The concepts addressed in this booklet are overviews of the most effective strategies for the most common issues - but individualisation is nearly always required from basic recommendations when shoulders are involved.



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UNDERSTANDING YOUR SHOULDER (ANATOMY)

The shoulder joint (glenohumeral joint) is a ball and socket joint between the scapula (shoulder blade) and the humerus (arm bone). It is the major joint connecting the upper limb to the trunk. We have an Acromion and a coracoid. Which act as points for muscle attachment. There are other connections that relate to the shoulder - more globally considered a 'girdle' - which are important regionally (eg. scapulothoracic joint, acromioclavicular joint), but unless

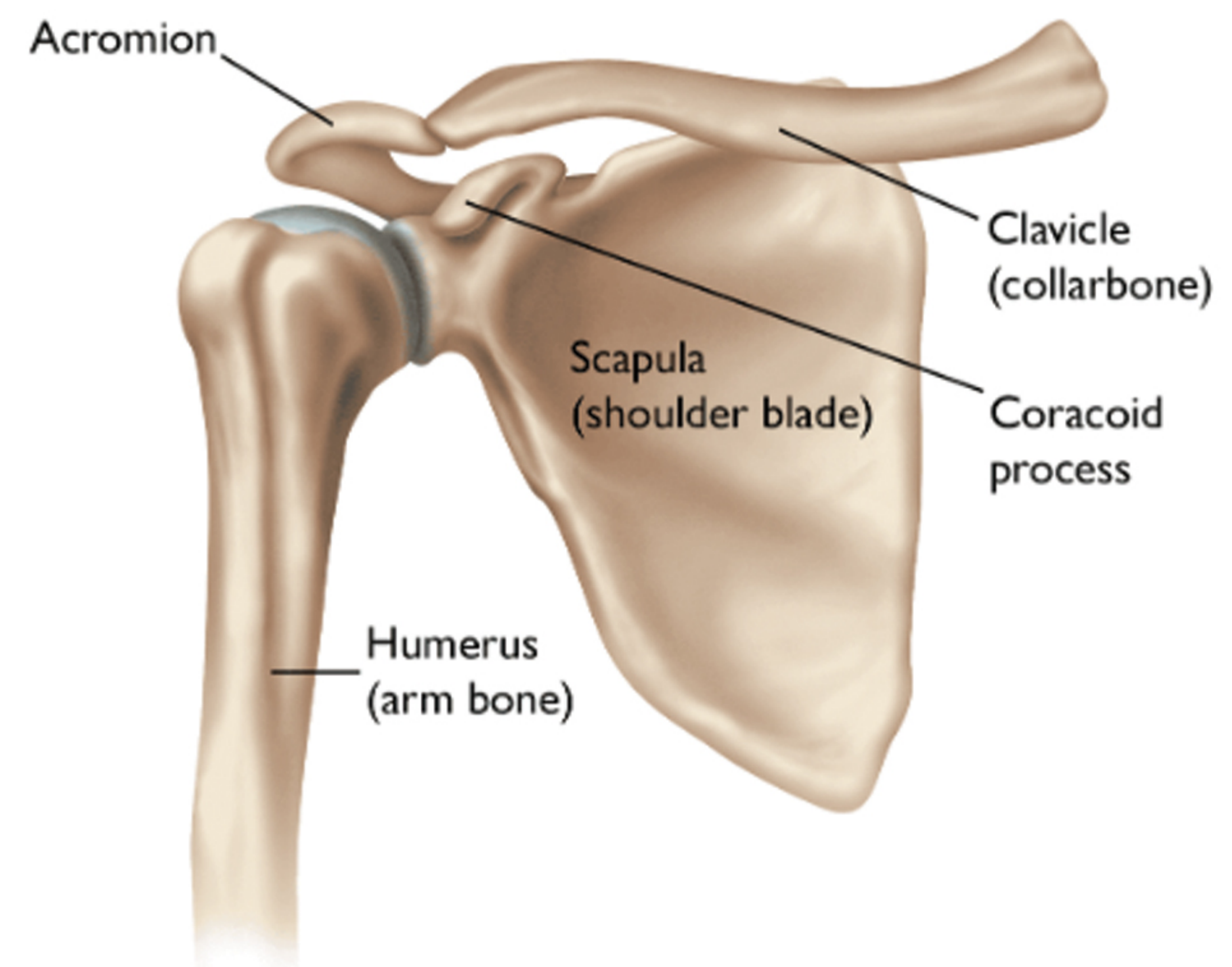
otherwise indicated, we will be referring to the first mentioned glenohumeral joint - the ball and socket joint.

As previously mentioned, the shoulder is one of the most mobile joints in the human body, but this comes at the expense of joint stability.



Factors that contribute to mobility:

- Type of joint - ball and socket joint.
- Bony surfaces - shallow glenoid cavity and large humeral head (1:4 disproportion)
- Inherent laxity of the joint capsule.



FACTORS THAT CONTRIBUTE TO STABILITY



Rotator cuff muscles

This group of muscles surround the shoulder joint, attaching to the upper portion of the humerus, whilst also blending with the joint capsule. The resting tone of these muscles act to compress the humeral head into the glenoid cavity.



Labrum

A fibrocartilage ridge surrounding the glenoid cavity. It deepens the cavity and creates a seal with the head of the humerus, reducing the risk of dislocation.



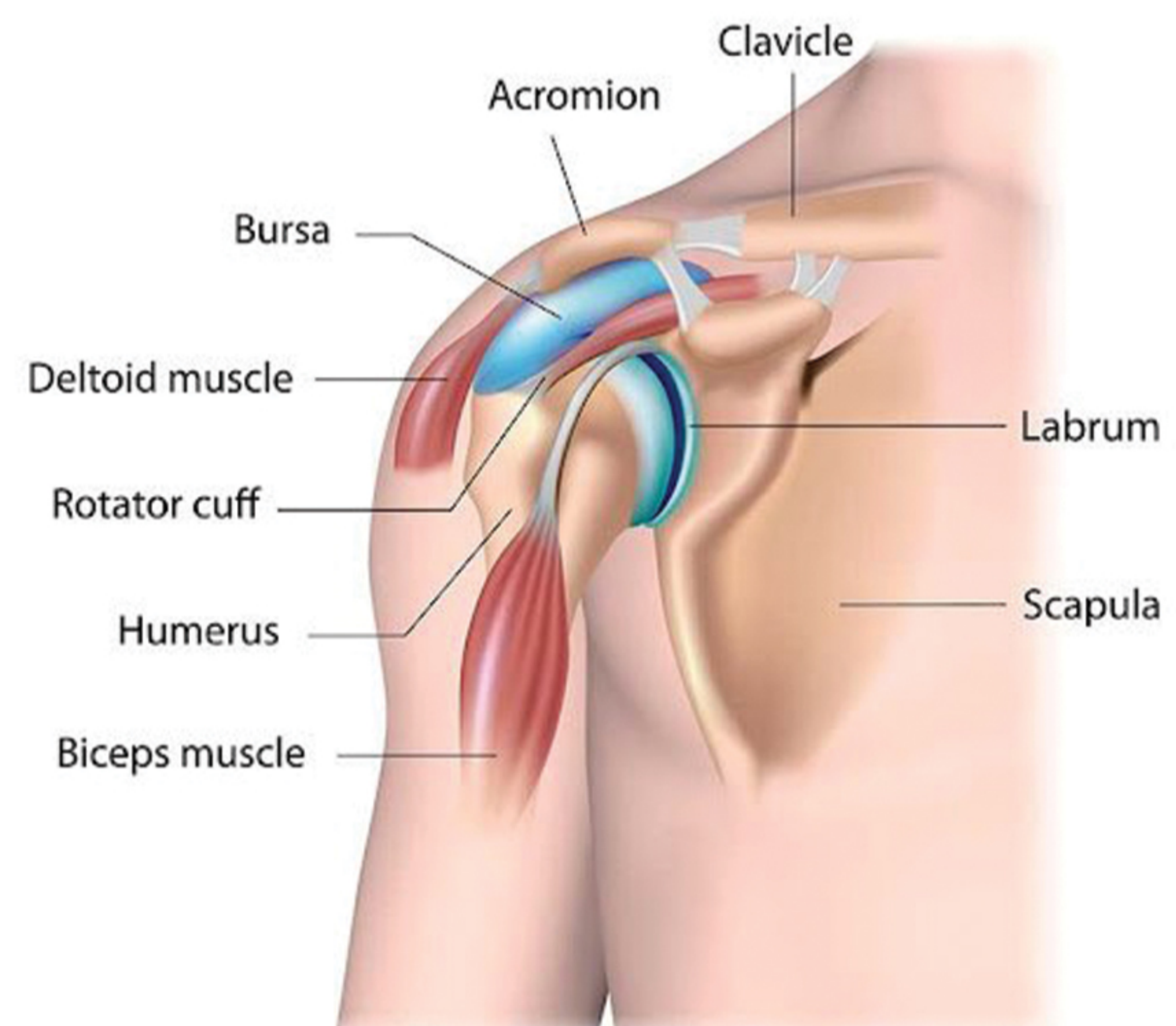
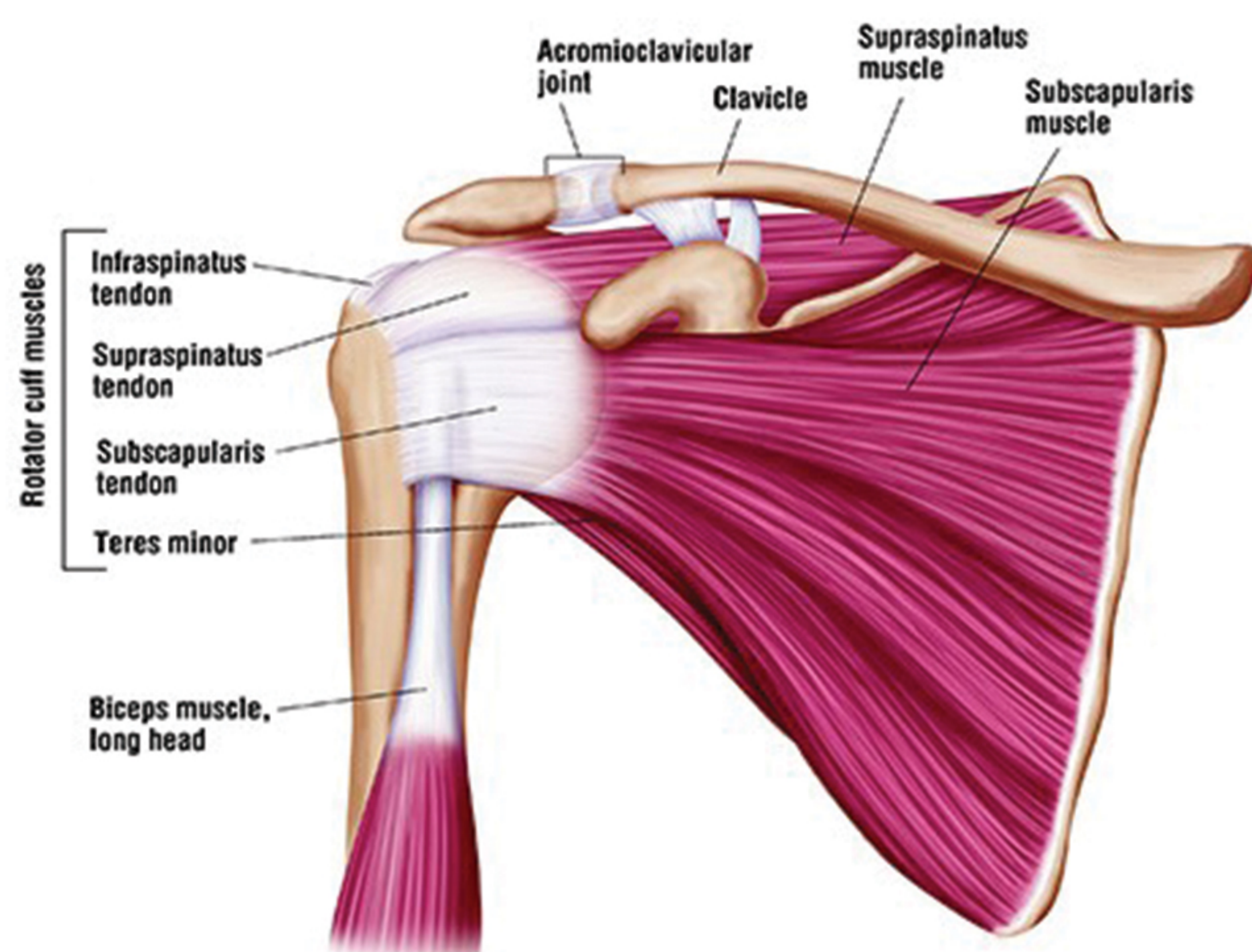
Ligaments

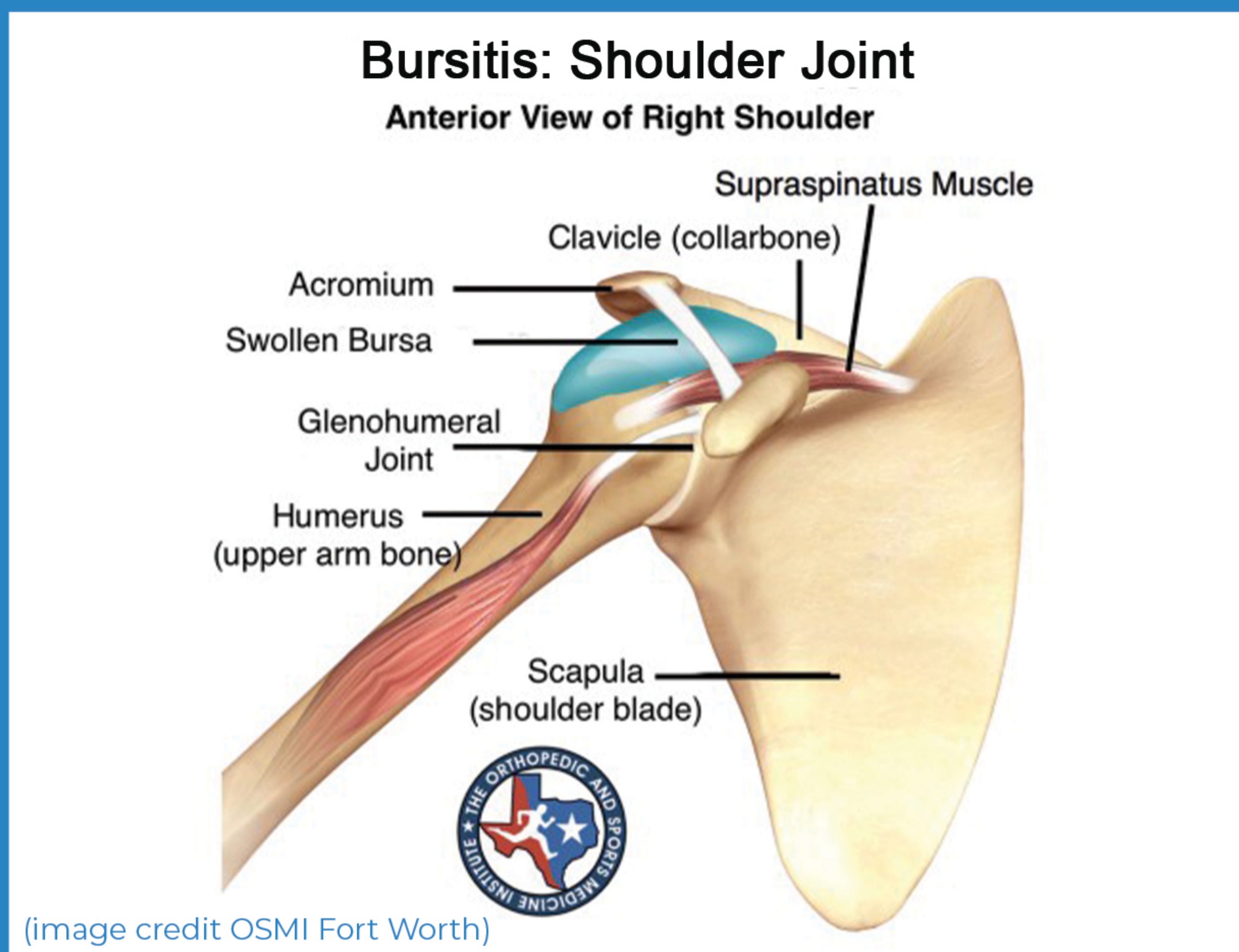
Act to reinforce the joint capsule.



Biceps tendon

It acts as a minor humeral head depressor, thereby contributing to stability.





WHAT ARE SOME OF THE MOST COMMON SHOULDER COMPLAINTS?

- **ROTATOR CUFF TEAR**

The Rotator Cuff is composed of the Supraspinatus, Infraspinatus, Teres Minor, Subscapularis muscles. A tear in the muscles or tendons surrounding the shoulder joint are frequent and common. This causes pain in the shoulder, especially associated with movement.

- **BURSITIS**

This is an inflammation of the fluid-filled sac that works as a cushion and gliding surface to reduce friction between tissues of the body. This may cause pain, swelling and stiffness around the joint. Pain can be felt with movement, and occasionally at rest or with compression - such as lying on the shoulder.

- **SHOULDER IMPINGEMENT**

The result of a vicious cycle of rubbing of the rotator cuff between your humerus and the top outer edge of your shoulder. The rubbing leads to swelling and narrowing of the space, which results in irritation.

- **ROTATOR CUFF TENDINOPATHY**

Unlike a muscle tear, a tendinopathy refers to an irritation of the tendon, rather than the muscle fibres. Pain is often felt with movement and can result in weakness of the arm or shoulder complex. This injury is usually a consequence of excessive loading of the muscle and its associated tendon.

- **FROZEN SHOULDER**

A condition affecting the shoulder, making it painful and stiff with extreme loss of mobility. Often described as a “6 months Freezing 6 months Frozen and 6 month Thawing”. This condition is highly frustrating and exquisitely painful.

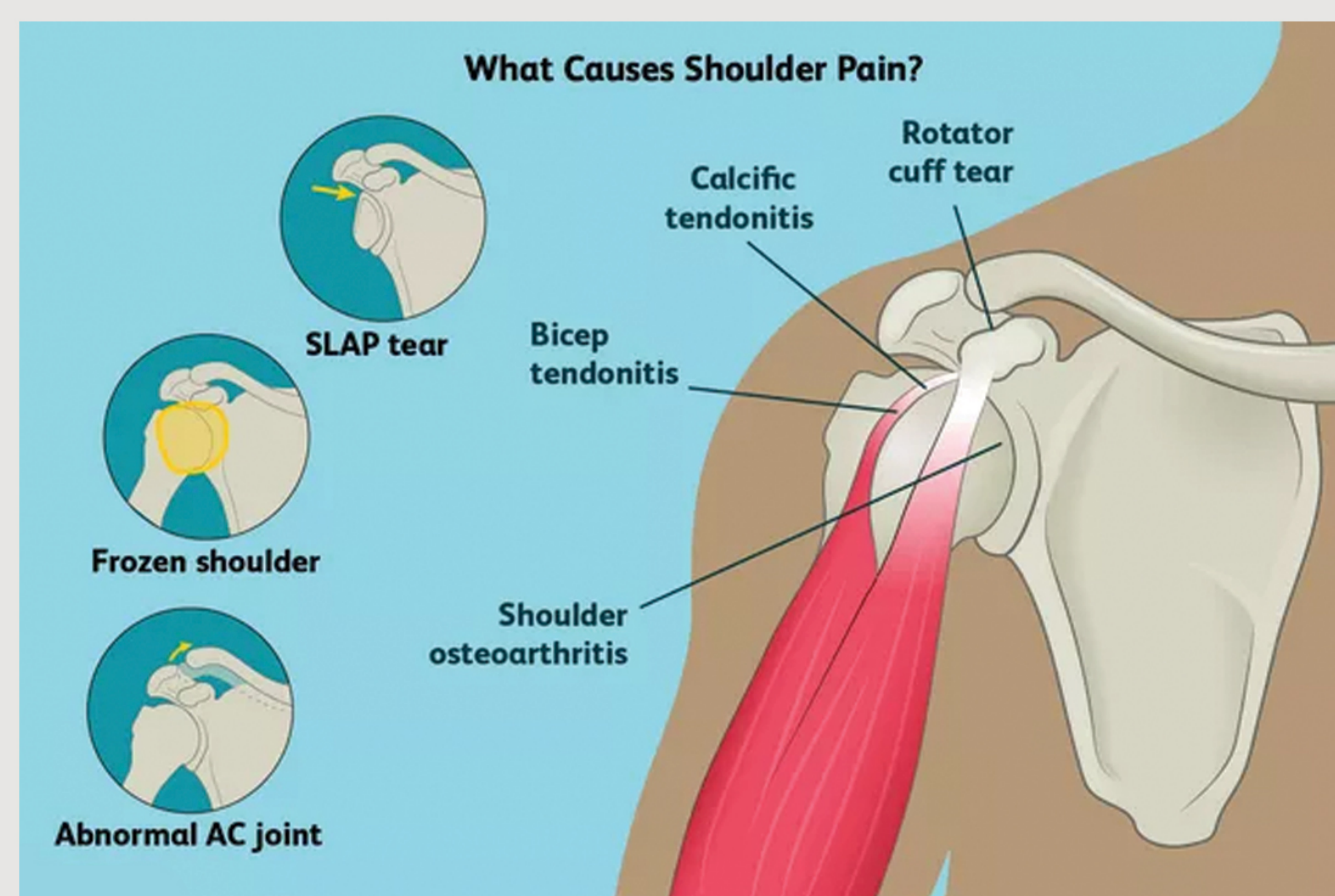
WHAT HAPPENS WHEN PEOPLE EXPERIENCE SHOULDER PAIN?



WHY DOES SHOULDER PAIN OCCUR?

Shoulder pain can develop with a traumatic sporting injury, with poor postural habits, gradually overtime, or for no apparent reason at all! Often the pain is worse at night, with many patients reporting disturbed sleep patterns due to shoulder pain. It is mostly those who sleep on the side (sleeping on the shoulder) that are mostly affected. Generally tossing from one side to the other seeking relief from the pain

We know that the shoulder girdle and rotator cuff is a complex group of muscles that needs to work in the correct pattern and position or you will impinge the tendon or squash the bursa. The shoulder and arm need a stable base to work off, or when you use your arm the ‘instability’ of the scapula and humerus will cause the tendon to be squashed.





WHAT CAUSES SHOULDER PAIN?

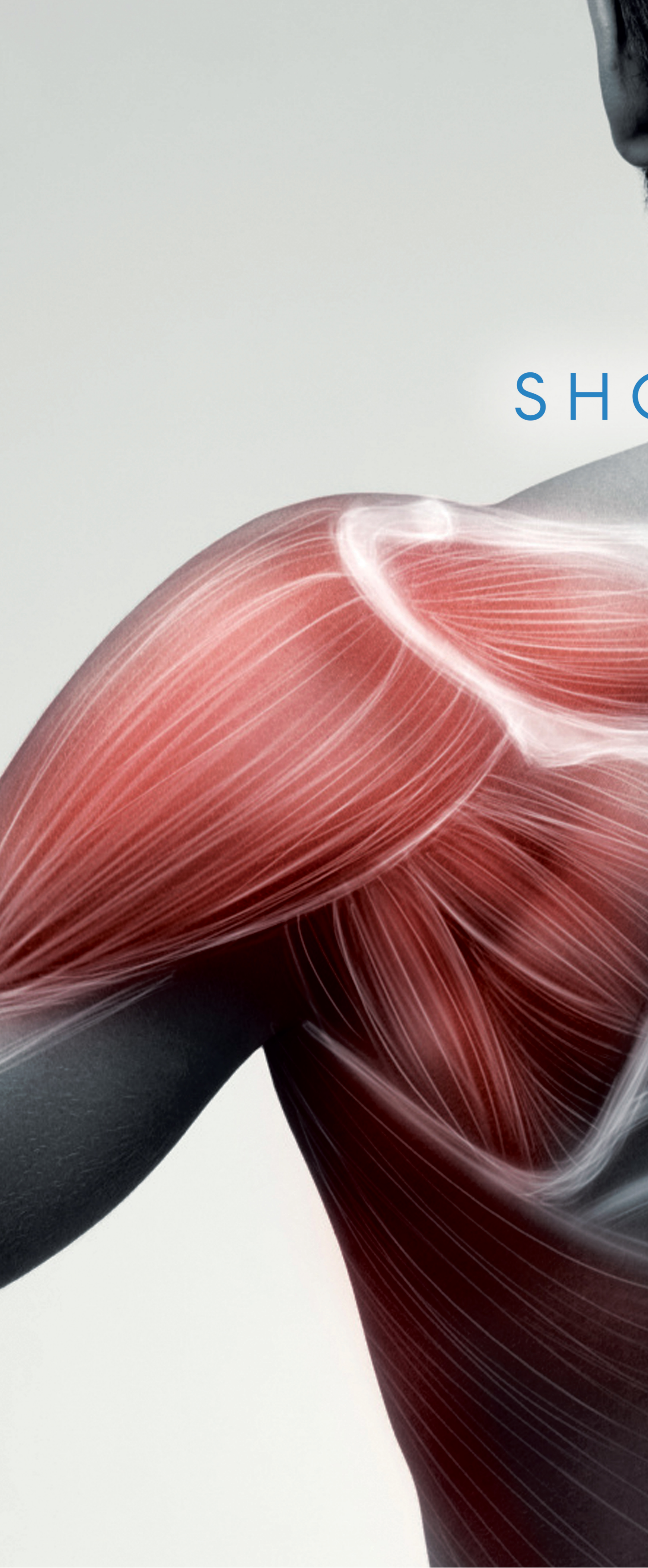
Pain, swelling and inflammation will develop if this continues to occur, and your shoulder will be sore. If your shoulder rolls forward, or you stoop over your laptop or phone, the muscles at the front of your shoulder become tight and the ones at the back become weak. This creates an imbalance, reinforcing your poor shoulder posture and causing further impingement and pain.

Poor posture or poor shoulder girdle position becomes your habit, and when asked to correct your 'bad posture', it is common to overcorrect, a thought pattern that is not sustainable nor does it address the root cause of the problem. If you keep compressing or impinging the soft tissues (tendon, muscle, bursa), your pain will persist and get worse.

Treatment directed at your shoulder pain will make you feel better. However, if you have the pain treated (soft tissue massage, dry needling, manipulation), but do not correct your:

- posture,
- joint stability or
- strength deficits,

you are only receiving a 'band aid' solution, as you will continue to re-injure and your pain will reoccur. This is short term relief, not a long-term solution. It is essential when receiving treatment to ensure your treatment is focused at your deficits, addressing your specific needs and weaknesses.



SHOULDER
PAIN
MYTHS

SHOULDER PAIN MYTHS



01 'My shoulder hurts. I need an MRI to figure out what's really going on before I can fix it.'

The primary problem with MRIs is that they are very sensitive, but they are not very specific. In other words, you can clearly see evidence of wear and tear, but that evidence does not necessarily tell you why you are in pain. That means information obtained from an MRI can be misleading and lead to even more unnecessary and ineffective treatments.

We regularly see problems such as small tears in people those with NO pain in the shoulder. This is the problem with scans.



02 'I have a rotator cuff tear. This means I'll need surgery to fix it.'

Why have a surgical procedure to fix something that many pain-free people also have? The goal is to improve the movement and reduce the pain - to feel better and to function better - and this can occur without going under the knife.

This is good research to suggest that often the same, if not better results can be achieved without the need for surgery.



03 'I've already tried physical therapy. It didn't work, so I shouldn't waste my time again.'

Almost every physical therapist is good at making people feel better. But what if I told you my goal as a therapist isn't solely to get rid of your pain? If I have not helped you improve the efficiency of movement of all the parts in and around the shoulder and addressed the mechanical stress that causes your shoulder pain I have not done my job properly. Without doing all these, your pain will likely return, and you will be frustrated that "yet another therapist couldn't help"

WHAT ELSE COULD BE CAUSING MY SHOULDER PAIN?



It is not unusual to have shoulder pain after absorbing the impact from a few hard tackles, repetitive movements performed while working, or from a workout routine. As mentioned above most instances of shoulder pain are due to rotator cuff tears, damaged cartilage and tendons, or swollen bursa sacs.

But there are times when shoulder-related discomfort might be linked to something going on within the neck.

Depending on which nerves in the neck are compressed, pain stemming from a nerve in the neck may appear to be localized in the shoulder region.

A common sign to differentiate a shoulder injury to nerve compression in the neck is by numbness, tingling or 'pins-and-needles' sensations into the arms or upper back. In addition, shoulder pain may become worse when you make certain head or neck movements.

You may also notice:

- Shoulder pain accompanied by neck stiffness
- Constant dull or sharp pain
- General weakness in the shoulder and neck area

AN OSTEOPATHIC APPROACH TO SHOULDER PAIN



As Osteopaths we conduct a comprehensive and thorough examination. This encompasses an overview of how your injury occurred?

Any contributing lifestyle or postural factors, and your past history. We want to delve deep so we can identify the “root cause of your pain. We will provide you with the acute treatment needed to ‘remove your pain”. Pain makes you miserable and stops you enjoying life, so we need and want to do this first!

As above we do this after careful assessment of **you** and **your** situation. We will tell you:

- 1) What is wrong
- 2) How we can help

We will then provide treatment and management plan to help remove your pain. The time this takes will vary from person to person, according to how long you have had your pain, and where your pain is coming from.

If you have successfully been through this before, you will know how great it feels when your shoulder pain goes away. But you may also know the feeling of disappointment, when the pain comes back (often quickly with a simple movement or posture). So, if you have not changed any of the factors in your life that may be causing your pain in the first place, it is not surprising that your pain reoccurs. We also know your shoulder muscles become weak with imbalances and pain, and don't spontaneously correct themselves when the pain settles. If your shoulder girdle is weak, vulnerable and you are often moving incorrectly, your pain will reoccur!



THE LONG TERM SOLUTION!

The long term solution focuses on identifying your underlying movement patterns and postural limitations. Once we have established these factors we can work to eliminate or correct them. We do this with a postural movement and strength analysis. This will help the Osteopath advise you on what you need to do to rebuild and restore your spinal stability, scapulothoracic posture and all accessory movements. If we remove your pain but do not change the factors which put you in pain, like poor stability, poor postural habits, poor movement patterns and muscle imbalances, we would be doing you a dis-service. This process of removing the pain and rebuilding and restoring movement will make you feel better than you were before.

We hope you can see that our osteopathic approach to shoulder pain does more than just get you pain free. It keeps you pain free! By developing exercise habits and an 'exercise for life' mentality, you can be confident that you have beaten your pain and get back on track to meet any life goals you have set for yourself.

OUR TOP 8 EXERCISES FOR SHOULDER PAIN

The exercises below are some of our most commonly prescribed exercises for shoulder pain. These can help improve movement and start the strengthening process. Please consult with your Osteopath or local health provider to see if these suggestions are suitable for your condition.



EARLY STAGE INTERVENTION
**SERRATUS ANTERIOR
WALL WALK**

EARLY STAGE INTERVENTION
SHOULDER TAPS

INTERMEDIATE STAGE INTERVENTION
SERRATUS PUSH-UP

INTERMEDIATE INTERVENTION
FACE-PULLS

INTERMEDIATE STAGE INTERVENTION
HALF-KNEELING HALO

INTERMEDIATE STAGE INTERVENTION
KETTLE-BELL DRAG

END STAGE INTERVENTION
**KETTLE BELL SHOULDER
PRESS**

END STAGE INTERVENTION
**LAND-MINE PRESS /
KETTLE-BELL PRESS**

BEGINNER EXERCISE SERRATUS ANTERIOR WALL WALK (EARLY STAGE INTERVENTION)

This is a great exercise that encourages controlled shoulder movement whilst maintain stability through your shoulder blades. It will increase how far you are able to move your shoulders without pain whilst also improving muscle strength and endurance.

HOW TO PERFORM:

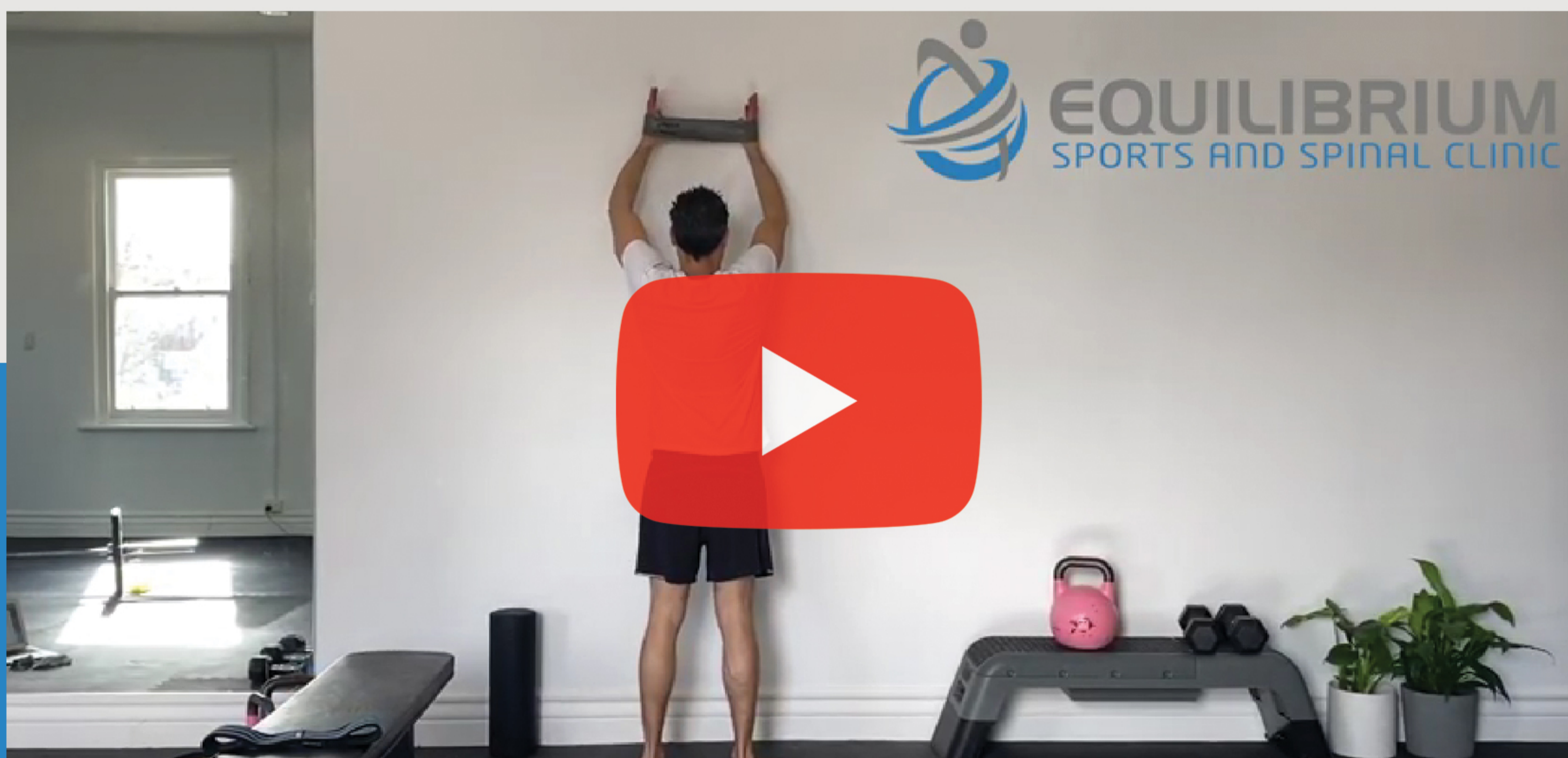
Stand facing the wall. Wrap a resistance band around your hands and gently pull this apart (this creates tension between your shoulder blades). Whilst maintaining this tension, slide your arms up the wall as if they were on train tracks. Once you reach your limit slowly return to the starting position and repeat.

Sets:

1 - 3 sets

Reps:

15 repetitions



THE EXERCISE: SHOULDER TAPS (EARLY STAGE INTERVENTION)

The shoulder tap exercise and its variations are a safe way to start to strengthen the muscles that stabilize the shoulder. It also incorporates strengthening of the spinal stabilizers and core musculature. This exercise is a must have when trying to reduce shoulder pain symptoms.

HOW TO PERFORM:

Put yourself into a push-up position with your hands against a wall. Once in position, lift one hand at a time to touch the opposite shoulder before returning to the start position. To make this exercise more difficult, set up your push-up position on a bench or even the floor.

Sets:

1 - 3 sets

Reps:

30 repetitions in total
(15 taps per shoulder)



THE EXERCISE: SERRATUS PUSH-UP (INTERMEDIATE STAGE INTERVENTION)

The Serratus Push-up is a great exercise to develop shoulder strength and control. You can start with a kneeling version and when you have enough control and strength progress to the full version.

HOW TO PERFORM:

Set yourself up with a small step. Start in a push up position with 1 hand resting on the step, and the other hand on the ground. Lift the arm that is on the ground, lift upward and hover, as your drive with your other hand off the step. Allow some mid back rotation, ensuring all the movement is coming through the supported hand and shoulder.

Sets:

1 - 3 sets

Reps:

10-12



THE EXERCISE: FACE-PULLS (INTERMEDIATE INTERVENTION)

The face pull exercise primarily targets the musculature off the upper back and shoulders, namely the posterior deltoids, trapezius, rhomboids, as well as the infraspinatus and teres minor muscles of the rotator cuff. The face pull is considered an important exercise for shoulder health and stability. This exercise can be done at a gym with a cable pulley machine and rope handle attachment or at home using an elastic resistance band.

HOW TO PERFORM:

Grasp the resistance band with both hands. Step back until your arms are fully extended, then engage your core. Perform a high row by pulling the resistance band until your elbows are in line with your shoulders. From here, externally rotate your shoulders 90 degrees. After this, reverse the process until you are back at the starting position.

Sets:

1 - 3 sets

Reps:

10-15 repetitions



THE EXERCISE: HALF-KNEELING HALO (INTERMEDIATE STAGE INTERVENTION)

This is a great exercise to improve shoulder mobility, strength and endurance while incorporating core stability.

HOW TO PERFORM:

Adopt a half kneeling stance. Hold a Kettlebell (with the handles pointing downwards) or weight at eye level.

Begin by circling to the right. Carry the kettlebell around the right side of your head and let the kettlebell drop down behind the neck. Finish the circle by bringing it around the left side of your head back to the starting position. Aim to try and keep the kettlebell as close to your neck as possible.

Keep the **elbows tucked** in and nice and close to the body all the way around the head. Don't forget to repeat the movement in the opposite direction.

Sets:

1 - 2 sets

Reps:

10-15 reps



THE EXERCISE: KETTLE-BELL DRAG (INTERMEDIATE STAGE INTERVENTION)

HOW TO PERFORM:

Start by adopting a standard plank position. Ensuring elbows are directly below your shoulders, and toes, hips and head in a straight line. Feet should be just outside of your hips for greater stability.

Place the kettlebell just behind your right hand.

Staying stable, but engaging your core and gluteals, reach the left arm across the chest to grab the kettlebell, dragging it on its side by the handle under your body, coming to a rest at the opposite side of your body.

Repeat the movement using the Right Arm.

The goal here is to keep the body as stable as possible during the movement.

Sets:

1 - 3 sets

Reps:

10-12 reps



THE EXERCISE: KETTLE BELL SHOULDER PRESS (END STAGE INTERVENTION)

The Kettle Bell shoulder press is a great end stage exercise to challenge the strength and stability of not only the shoulder complex, but also the core.

HOW TO PERFORM:

Adopting a half kneeling stance. Ensure your hips are stable and there is no arching in your lower back. Grabbing the kettle bell by the handles, with the bell pointing upwards, slow press the weight upwards. Ensure tension through the upper limb, the direction should be straight up. Stability needs to be maintained in the lower back and core.

Control the weight as it returns to the start position.

Sets:

1 - 3 sets

Reps:

10-12 reps



LAND-MINE PRESS / KETTLE-BELL PRESS (END STAGE INTERVENTION)

The landmine press is a great exercise for almost all of your upper body, with the chest, triceps and shoulders working hard during the movement. The curving path of the press and the grip make landmines presses slightly easier on the shoulders than vertical presses.

HOW TO PERFORM:

Ensure the barbell is wedged in the corner. Adopt a half kneeling position with a stable core and pelvis. If you are pressing with your Right arm, the Left knee should be bent at 90 degree's. Press the weight up with your arm, keeping it in line with your shoulder rather than moving it towards the middle of your body. Maintain a stable core, and try not to arch backwards as you press forwards.

Sets:

1 - 3 sets

Reps:

10-12 reps





WHAT
ELSE
CAN I
DO
FOR
MY
SHOULDER
PAIN?

WHAT ELSE CAN I DO FOR MY SHOULDER PAIN?

01 Learn more

Education is one of the most powerful tools we have. Ensuring you fully understand what is going on with your shoulder is vital to your long term health and wellbeing. Approximately 22-30%¹ of the adult population with experience shoulder pain at some point.

This means there will be a lot of “theories” floating about the best way to manage your shoulder pain. Find someone who can explain in language you understand, your condition, and provide a crystal management plan specifically for you.

02 Hydration

Being able to control simple aspects of our life is empowering. Something as simple as staying hydrated can make a big difference to your mood, and the way your body functions.

03 Sleep

This is when our bodies heal. Ensuring you get enough sleep goes a long way to coping with shoulder pain. You can do this by applying the practice of good sleep hygiene. This involves going to bed at the same time each night, avoiding stimulants before bed and aiming for about 6-8 hours of sleep.

¹ SHOULDER DISORDERS AND OCCUPATION -Dr CH Linaker and Dr K Walker-Bone, Associate Professor & Honorary Consultant in Occupational Rheumatology 2019

WHAT ELSE CAN I DO FOR MY SHOULDER PAIN?

04 Movement

Our bodies are designed to move. Getting the right advice on how to best move and at what intensity is vital. Seeking advice from a qualified health professional who understands shoulder pain is key. As mentioned earlier, there is no one size fits all approach when it comes to shoulder pain. Your osteopath will be able to guide you through how much, and which exercises will be best for your training and rehabilitation goals.

05 Pain Medication

In the early stages of an acute shoulder pain injury, medication may be helpful. Pain medication should only be used for a short period of time, if at all, and never as the sole treatment. By taking medication to reduce pain intensity, it allows you to be able to move more, complete more rehabilitation and begin the recovery process. However, always seek advice before taking any medication.



PREVENTION OF SHOULDER PAIN

As with any injury, prevention is our number one goal and priority. Knowing how to move, which exercises to perform and having a good understanding of what factors contribute to shoulder pain are essential. If you are unsure where to start, having a chat with one of the Equilibrium Sports and Spinal team is a great first step.

Unfortunately there is no magic bullet when it comes to shoulder pain. Just as there is no magic exercise that will cure your shoulder pain. All exercise is good, as long as it is specific to you and your body and gradually undertaken.

Seeking advice and guidance from a trained professional who understands shoulder pain and its complexity is your first step to regaining control of your life - pain free!

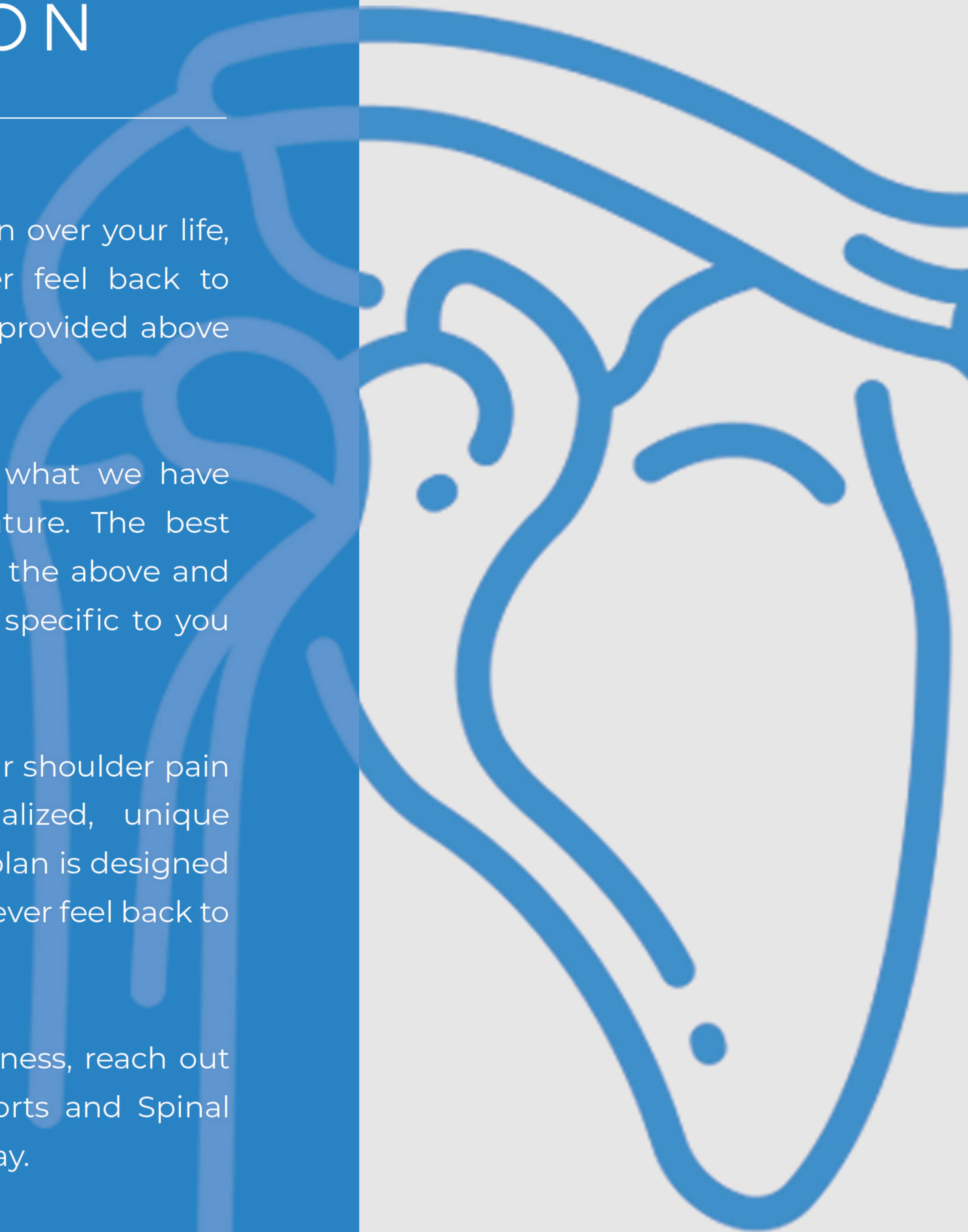
CONCLUSION

If your shoulder pain has taken over your life, and you're afraid you'll never feel back to normal, then the information provided above is a great start!

Keep in mind however, that what we have discussed is of a general nature. The best results are achieved by taking the above and distilling it down, so that it is specific to you and your shoulder.

Ensuring the root cause of your shoulder pain is identified and a personalized, unique treatment and management plan is designed for you is the only way you will ever feel back to your old self.

For long term health and wellness, reach out to any of the Equilibrium Sports and Spinal team to build a better you, today.





We at Equilibrium Sports and Spinal treat the cause of shoulder pain - never just the symptoms.

striving to make you better than you were yesterday!



THANKS!

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Equilibrium Sports and Spinal Clinic

If you have any questions, feel free to email us at

14 High St, Glen Iris, VIC 3146

info@equilibriumsas.com.au

(03) 9822 1900