

SHOULDERS STABLE AND STRONG WITH PILATES

SHOULDER INJURIES CAN BE DEVASTATING AND THEY CAN BE DIFFICULT TO ACCURATELY DIAGNOSE, FRUSTRATING TO TREAT AND SLOW TO REHABILITATE. MOST OF ALL, SHOULDER INJURIES AFFECT SO MANY DAILY ACTIVITIES, NOT JUST SPORT. LIFTING KIDS, GARDENING, GETTING DRESSED AND SLEEPING ARE ALL POTENTIAL SHOULDER PAIN AGGRAVATORS. ONCE YOU'VE HURT YOUR SHOULDER, IT'S NOT EASY TO IGNORE.

By Katie Mackenzie, physiotherapist and Master Pilates Instructor at Studio Pilates International®



Part of the problem is the actual structure of the joint. The shoulder was designed for mobility. Articulating only through one joint on each side of the sternum, the clavicle and scapula provide a bony shell supporting the ball-and-socket joint we know as the shoulder. The rest of the support is gained through muscle tissue, which can stretch, tighten and tear, and tendons, which are easily irritated. While this set-up allows for maximum movement, it is at the cost of stability, and it is not surprising that an unstable joint can easily become an angry joint.

There is usually no quick way to determine the cause and management of shoulder pain and often a whole-body approach is required. An acute shoulder injury, such as a sudden sharp pain while lifting a weight in the gym (particularly overhead), should be treated with rest, ice, restricted movement and appropriate medical/physio follow-up. More commonly though, shoulder injuries are referred to as 'niggles' or have been plaguing our clients for years and only really hurt during specific movements or activities.

“CAN YOU HAVE A LOOK AT MY SHOULDER, IT'S BEEN HURTING LATELY?”

Next time a client asks you for exercises to 'strengthen up their dodgy shoulder', looking holistically at the situation is more likely to get to the root of the problem and will achieve longer-lasting results, an improvement in posture and habits and hopefully an end to shoulder pain.

Ask the client about their exercise habits and occupation. Consider whether they spend all day with their hands on a computer keyboard, or whether they perform manual labour. This will assist you with assessing likely muscle imbalances due to repetitive movements or postures.

OBSERVATION IS YOUR BEST TOOL WHEN ASSESSING A SHOULDER:

PERFORM A QUICK POSTURAL OBSERVATION, LOOKING AT:

- Pelvic position (bottom tucked under or sticking out?)
- Abdominal tone
- Thoracic spine (kyphosis/swayback?)
- Scapula position (high, winging, rotated, right v left?)

During a workout, watch your client's overhead movements. Are the movements of shoulder flexion, extension, external rotation and abduction generally restricted? Do the shoulders move smoothly or do they catch or hitch? Are they equally using their right and left arms? Clients will often overuse their neck muscles (upper trapezius) and let go of their abdominals when taking the arms overhead, so remember to look holistically.

If it's clear your client is exhibiting a few of the above movement patterns, you'll be able to identify the weak and tight areas of their shoulder joint and formulate a plan. If the issue is still confusing, or more complicated than first thought, it may be best to refer them to a physiotherapist or their GP for further investigation.

REBALANCING THE MUSCLES

For shoulder rehabilitation, we are aiming for balanced muscles supporting the scapula and head of humerus securely in the joint. Most people don't have this and it is only through stretching and strengthening their specific muscle dysfunctions that they'll correct it.

Commonly, niggling shoulder pain is due to mild inflammatory conditions such as tendinitis, impingement, previous shoulder dislocations or arthritis. For these conditions, low resistance and isolated exercises are best to regain stability in the joint.

COMMON AREAS THAT NEED ATTENTION IN A CLIENT WITH SHOULDER PAIN INCLUDE:

DEEP ABDOMINALS	Support the spine, providing a stable base for the muscles supporting the scapulae
LOWER TRAPEZIUS	Depress and externally rotate the scapula, allowing space for the humerus to elevate during flexion and abduction.
SERRATUS ANTERIOR	Helps lay the scapulae flat along the ribcage, preventing winging and assisting with scapula rotation.
ROTATOR CUFF	A group of small muscles surrounding the shoulder joint, providing stability to the humeral head through co-ordinated muscle contractions
LATISSIMUS DORSI	Internally rotate the shoulders when tight
PECTORALIS MAJOR AND MINOR	Internally rotate the shoulders when tight
UPPER TRAPEZIUS	Elevate the shoulders, and are usually overactive

Most people find overhead positions aggravate their pain, so it is best to avoid exercises that involve this position until their shoulder stability and symptoms have improved. So, instead of skull crushers and overhead press, try these basic shoulder stabilisation exercises:

“NEXT TIME A CLIENT ASKS YOU FOR EXERCISES TO ‘STRENGTHEN UP THEIR DODGY SHOULDER’, LOOKING HOLISTICALLY AT THE SITUATION IS MORE LIKELY TO GET TO THE ROOT OF THE PROBLEM AND WILL ACHIEVE LONGER-LASTING RESULTS, AN IMPROVEMENT IN POSTURE AND HABITS AND HOPEFULLY AN END TO SHOULDER PAIN.”

DURING ALL THESE EXERCISES, ENSURE THAT YOUR CLIENT:

- Draws the shoulder blades down and back, opening the chest
- Keeps the abdominals activated to avoid arching the back
- Keeps the neck relaxed
- Feels no shoulder pain

LOWER TRAPEZIUS ACTIVATION #1

Aim: To isolate and activate the lower trapezius
Lie face down with the arms outstretched overhead, palms turned down.

INHALE



Lie face down, arms bent with the hands resting on the ground beside the head in a stop

EXHALE: slide the shoulder blades down and back

INHALE: release
This is only a very subtle movement
Repeat x 10

EXHALE



LOWER TRAPEZIUS ACTIVATION #2

Stop sign position with the palms facing down.

INHALE



To challenge: lift the hands as you slide the shoulder blades down and back.

EXHALE: slide the shoulder blades down and back

INHALE: release
The hands and arms stay on the ground
Repeat x 10

EXHALE



FLIGHT

Aim: To isolate and activate the lower trapezius and rotator cuff

INHALE



EXHALE



“COMMONLY, NIGGLING SHOULDER PAIN IS DUE TO MILD INFLAMMATORY CONDITIONS SUCH AS TENDINITIS, IMPINGEMENT, PREVIOUS SHOULDER DISLOCATIONS OR ARTHRITIS.”

CHEST EXPANSION WITH BAND

Aim: To work the lower trapezius, rhomboids, latissimus dorsi, triceps, rotator cuff

INHALE



Sitting on a mat with a rubber band around the feet, hold the band with the arms out in front.

EXHALE: draw shoulder blades down and back, sweep the arms back to the hips

INHALE: return to the start position.

To challenge, make the band shorter.

Repeat x 20

EXHALE



DURING A WORKOUT, WATCH YOUR CLIENT'S OVERHEAD MOVEMENTS. ARE THE MOVEMENTS OF SHOULDER FLEXION, EXTENSION, EXTERNAL ROTATION AND ABDUCTION GENERALLY RESTRICTED? DO THE SHOULDERS MOVE SMOOTHLY OR DO THEY CATCH OR HITCH?

EXTERNAL ROTATION WITH BAND

Aim: To work the lower trapezius, rhomboids, rotator cuff
Sitting on a mat with a rubber band around the feet, hold onto the band with the elbows bent to 90 degrees and upper arms in close to the body, palms facing each other.

INHALE



Sitting on a mat with a rubber band around the feet, hold onto the band with the elbows bent to 90 degrees and upper arms in close to the body, palms facing each other.

EXHALE: draw shoulder blades down and back and separate the hands, turning the arms outwards while keeping the elbows touching your sides.

INHALE: bring hands back to start position

Repeat x 20

EXHALE



FINISH OFF WITH A FEW STRETCHES TO CORRECT THE MOST COMMON MUSCLE IMBALANCES:

LAT STRETCH

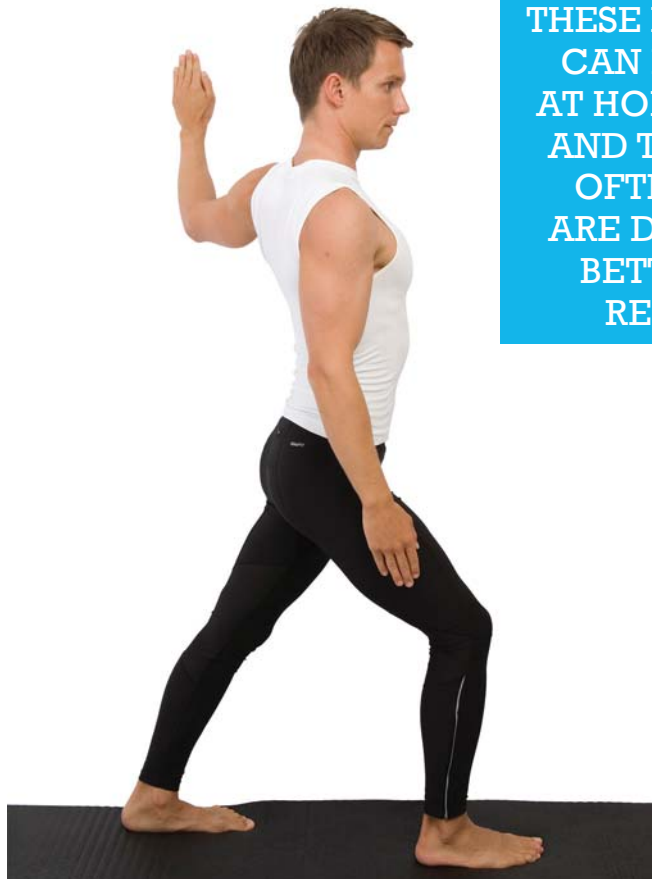
Stand holding onto a bench, pole or other sturdy object that is about hip height. Lean the body backwards, pulling backwards on the object, lowering head and shoulders between the arms. Rotate the hips to the left side, making a "c" shape with the body, keeping the shoulders still. Push the left hand into the bar, and pull with the right hand to stretch the right side. Hold for 30-60 secs, repeat for the other side.



“ASK THE CLIENT ABOUT THEIR EXERCISE HABITS AND OCCUPATION. CONSIDER WHETHER THEY SPEND ALL DAY WITH THEIR HANDS ON A COMPUTER KEYBOARD, OR WHETHER THEY PERFORM MANUAL LABOUR.”

PEC STRETCH

Stand in a doorway or next to a pole or wall. Place the left forearm against the wall at shoulder height with the elbow bent to 90 degrees. Step forwards and rotate the body to the right (or away from the wall) to stretch the chest muscles. Hold for 30 seconds to one minute, swap sides.



NECK STRETCH

Stand with the arms by the side, gently draw the right ear across towards the right shoulder, slide the left hand down the leg. Feel the stretch on the left side of the neck. **ufm**



THESE EXERCISES CAN BE DONE AT HOME EASILY AND THE MORE OFTEN THEY ARE DONE, THE BETTER THE RESULTS!

Katie Mackenzie is a Studio Pilates International® Master Pilates Instructor and has a bachelor in Physiotherapy from the University of Queensland. In addition to her passion for Pilates, Katie loves to run and regularly competes in marathons. Katie balances her time between her young family, her passion for practicing and teaching Pilates and running at least five times a week.