樂動預健及物理治療中心
Happy Prehab Physiotherapy Centre

Neck and Upper Back Pain

Physiotherapy Leaflet

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Introduction

In addition to personal habits, the main causes of rounded shoulders and hunchback are often related to muscle imbalance. Common issues include tightness in the pectoral muscles and latissimus dorsi, along with weakness in the upper back and rotator cuff muscles. This muscular imbalance gradually leads to poor posture such as rounded shoulders and a hunched back.

In this posture, movement of the spine and shoulder joints becomes more difficult, increasing the risk of shoulder and neck pain. Hunchback posture may also contribute to conditions such as tension headaches originating from the upper neck, rotator cuff tears, herniated discs, numbness in the hands and feet, and sciatica.

By improving posture, relaxing tight muscles, and strengthening the back and rotator cuff muscles, while maintaining the neutral curve of the spine, symptoms can often be significantly improved.

Patients with shoulder and neck pain or upper back pain are encouraged to refer to exercise guides or pamphlets that include movements helpful for alleviating discomfort and improving their condition.

Neutral Spine

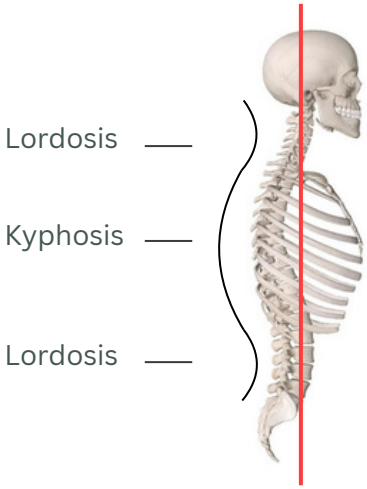


Figure 1. The ideal curvature of the spine

The healthy, fully functional human spine has a 30–35° curve in the lumbar, thoracic and cervical spines, all in balance.

Imagine a gentle string pulling upward from the top of your head, lengthening your spine toward the ceiling. This subtle pull encourages your head, neck, and back to stay tall and aligned, helping you maintain a neutral spine with an elongated and naturally curved posture.

Relationship between upper limb pain and poor posture

The head of an average adult weighs about 10 to 12 pounds. Studies have shown that for every inch the head tilts forward, the pressure on the neck increases by approximately 10 pounds. If the head tilts forward by 3 inches, combined with its own weight, the neck endures about 40 pounds of pressure. No wonder people with poor posture are more likely to suffer from shoulder, neck, and back pain.
Rounded shoulders can cause the chest muscles to stay shortened over a long period, worsening hunchback problems. This posture imbalance can also lead to shoulder muscle strain and tendon tears.

Position your hand to hold your phone at heart level. This helps prevent unnecessary strain on your neck that occurs when you hold your phone too high or too low.

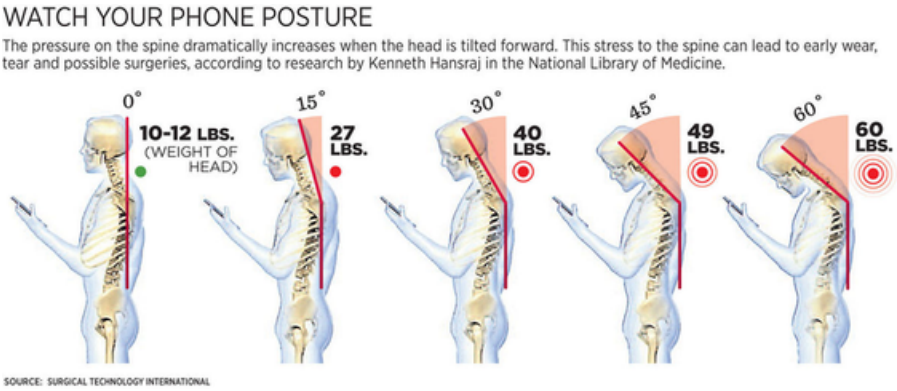
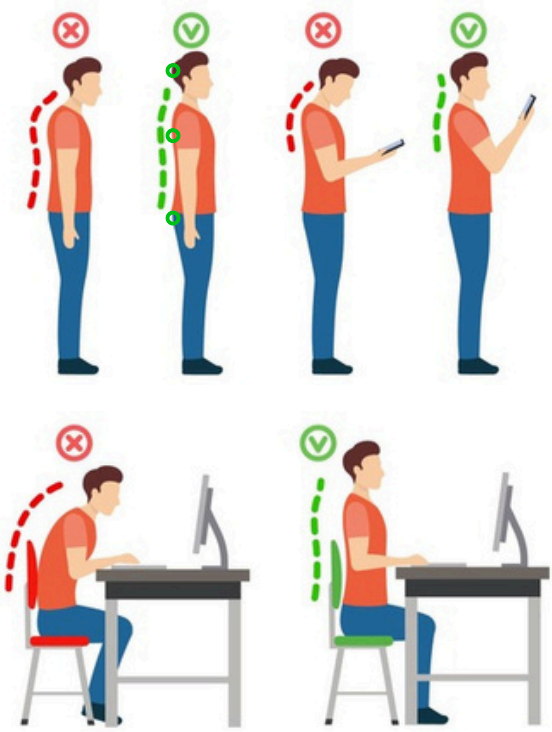


Figure 2. The pressure exerted on the cervical spine at different angles

What is an ideal posture?



In daily life, whether standing, sitting, or using your phone, try to minimize tilting your head down and bending your waist, and keep your back straight. Lift your head, chest out, and engage your core so that your head, shoulders, neck, and torso form a straight line. When using your phone, keep it close to eye level (around 0°—10°) to help reduce pressure on your neck.

O three points: head, upper back, and tailbone—are aligned in a straight line.

Stretching | Pectoral Muscle Stretch

Stretching the chest muscles typically helps reduce rounded shoulders and alleviates neck and shoulder pain.

Figure 3. Front view

Figure 4. Side View

1. Loop the resistance band around both hands and gently pull outward to create tension.
2. While maintaining the tension in the resistance band, slowly lift both hands upward.
3. Bring the band over and behind your head until you feel a stretching sensation at the chest, then slowly pull it down along your upper back.

Stretching| Sideways Stretch

Stretching the muscles on the sides of the waist and back typically helps relieve neck, upper back, and neck-side pain.

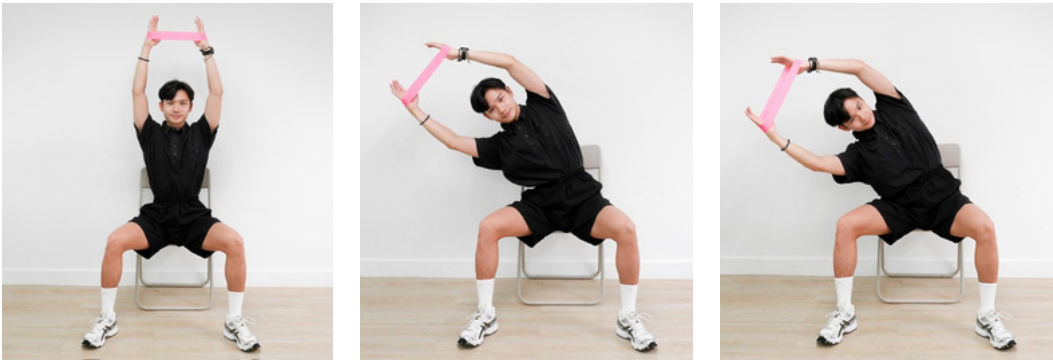


Figure 5. Front view

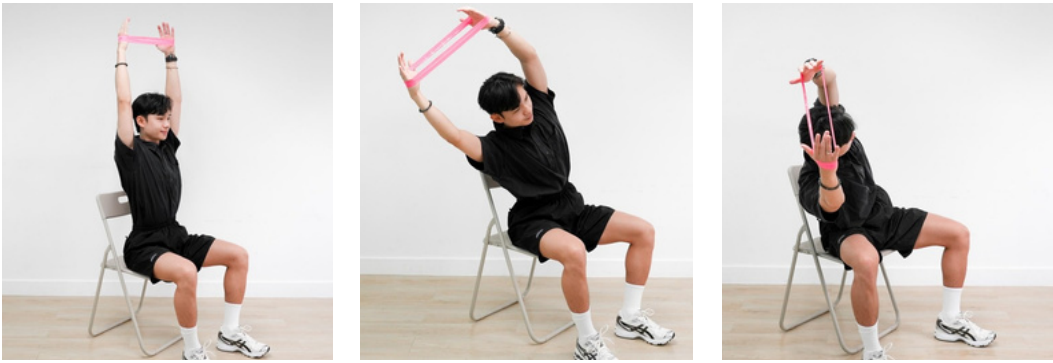


Figure 6. Side View

1. Loop the resistance band around both hands and slowly lift both hands upward.
2. Bend your body sideways.
3. Continue until you feel a stretch in the opposite shoulder and the muscles along your waist and back.
4. Repeat on the other side.

Stretching | Trunk Rotation Exercise

Not only helps to mobilize the trunk, it also effectively stretches the shoulder and chest muscles. Additionally, it strengthens the rotator cuff and back muscles. It is particularly beneficial in relieving unilateral neck and shoulder pain.

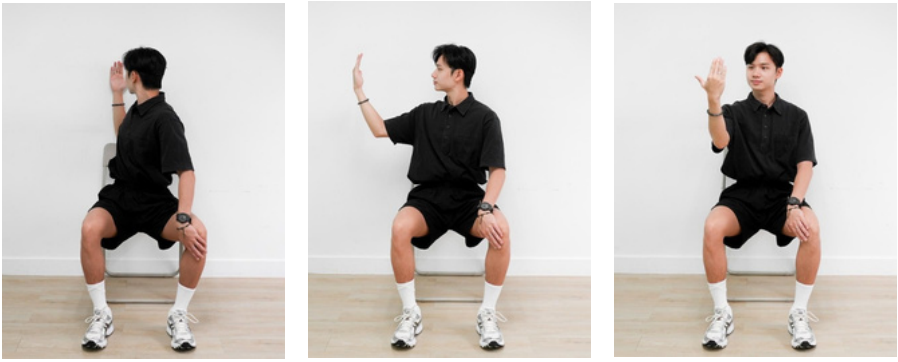


Figure 5. Front view

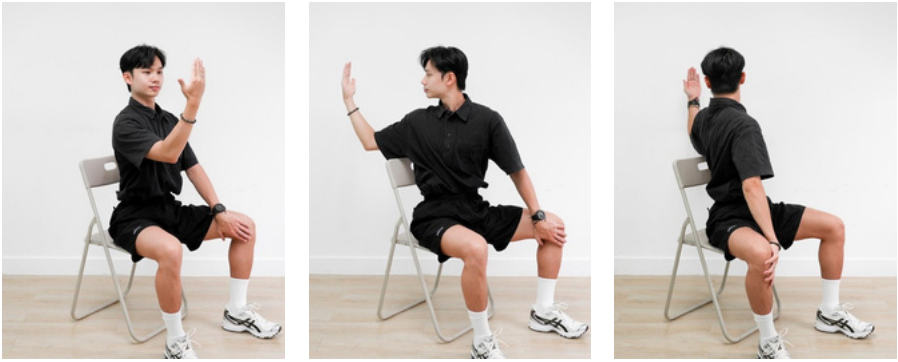


Figure 6. Side View

1. Lift the affected arm with the palm facing yourself. Maintain visual contact with the hand throughout the movement.
2. Rotate the arm outward while simultaneously turning the upper body backward, until the maximum stretch is felt in the pectoral muscles.
3. Repeat the procedure on the contralateral side.

Stretching | Thoracic Extension

By placing a rolled towel under the thoracic spine, this can passively mobilize and stretch the thoracic spine, improve a hunched back posture, and prevent back pain.

Figure 7. Demonstraion

1. Roll a towel into a cylindrical shape.
2. Place the towel sequentially on the thoracic spine while extending both arms.
3. Avoid excessive arching of the lower back (lumbar spine); focus on stretching the upper back (thoracic spine).
4. Repeat the movement 3 to 4 times, maintaining each position for approximately 2 minutes.

Stretching | Cobra

This exercise helps strengthen the muscles on both sides of the spine and the surrounding muscles, promotes spinal extension, and opens the shoulders and abdominal region.

Figure 8a. Starting Pose

Figure 8b. Ending Pose

1. Place both hands on the bed.
2. Position the hands slightly wider than shoulder width.
3. Engage the muscles of the lower back, waist, and arms to facilitate spinal extension, while using both hands to further assist the upper body in leaning backward. Ensure the shoulders are relaxed and not elevated.
4. Hold the position for 2-5 seconds. Repeat the movement at least five times, or more according to individual ability.

Stretching | Thoracic Rotation

Not only mobilizes the intervertebral joints, this exercise also effectively stretches the muscles of the waist and the front of the chest. It helps improve thoracic spine flexibility, open the chest, and reduce rounded shoulders.

Figure 9. Ending Pose

1. Lie on your side with the lower leg extended and the upper knee bent.
2. Rotate the lower shoulder outward.
3. Rotate the upper arm outward to the opposite side, thus achieving thoracic spine rotation.
4. Hold this position for 10 seconds, maintaining steady breathing. Repeat the movement 10 times.
5. Perform the exercise on both sides.

Strengthening | Shoulder ER

This exercise helps stabilize the shoulder joint and can effectively reduce pain caused by shoulder instability.

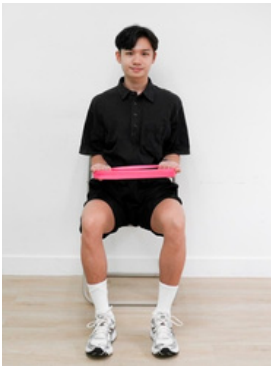


Figure 10. Front View

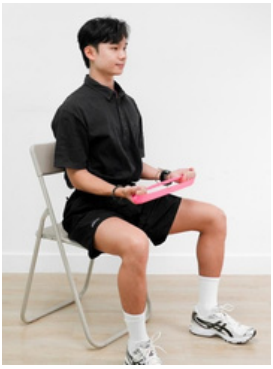


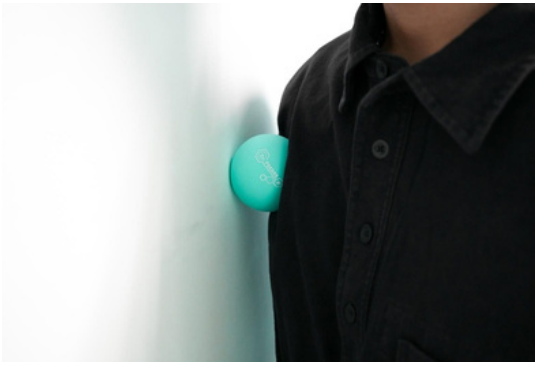
Figure 10b. Side View

1. Keep your back straight, open your shoulders, and retract your shoulder blades inward.
2. Bend your elbows to 90 degrees, hold the elastic band with both hands, and place it on your sides at your waist.
3. Rotate your shoulders outward while pulling the elastic band outward.
4. Throughout the process, keep your elbows and arms close to your sides at the waist.
5. Then slowly return to the starting position.

Myofascial Self-Release

Use a massage ball or foam roller to do a myofascial self-release for yourself.

Figure 16a. Demonstration - levator scapulae/trapezius



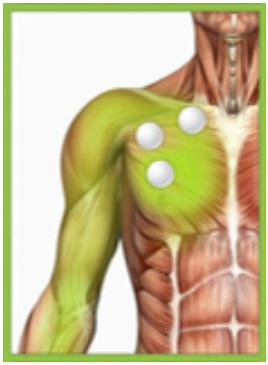
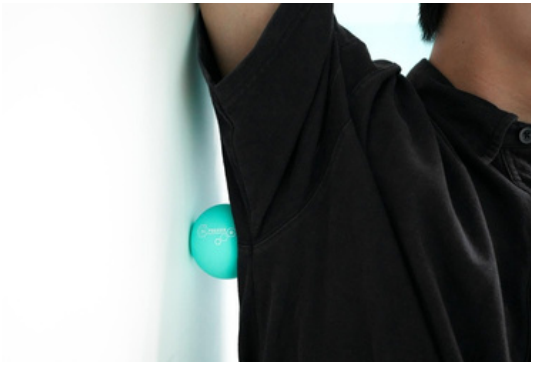


Figure 16b. Demonstration - Pectoral muscle



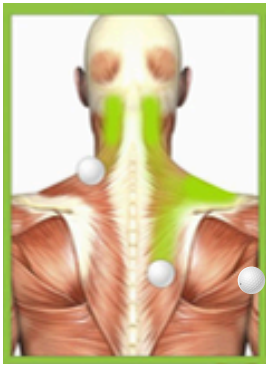
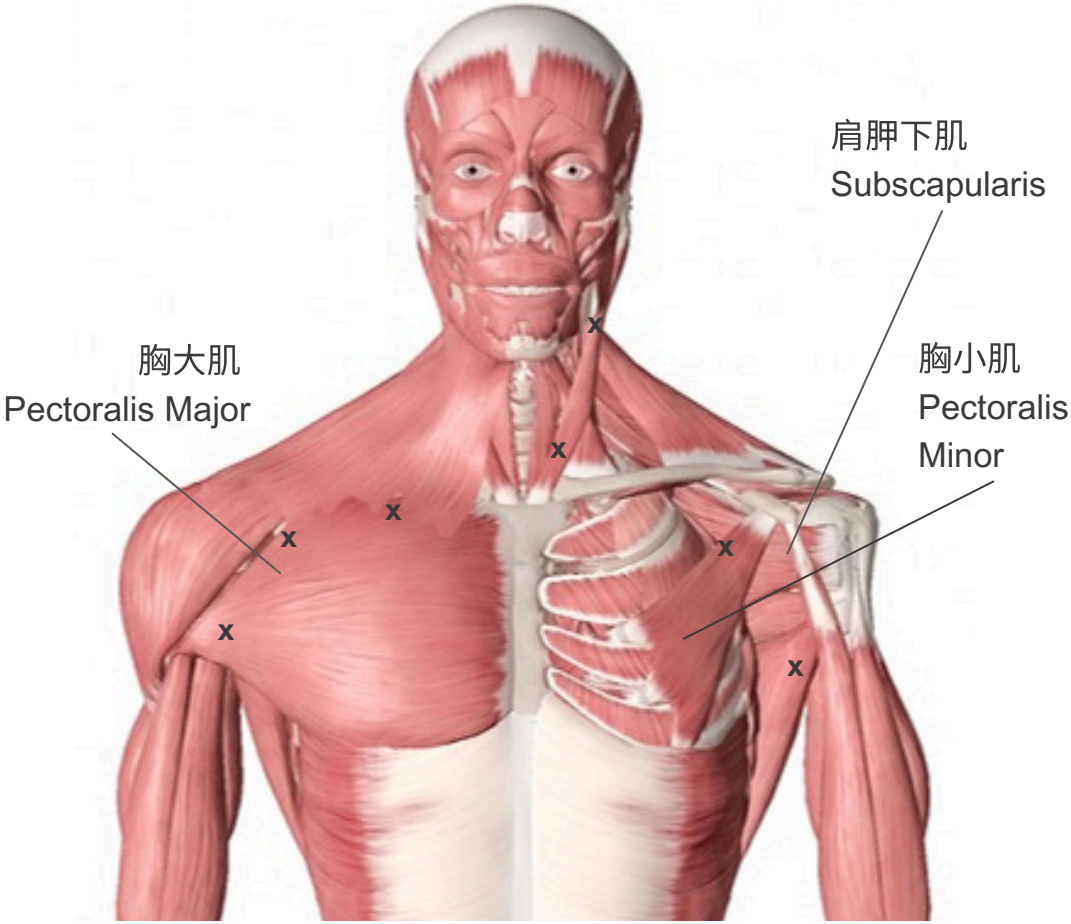


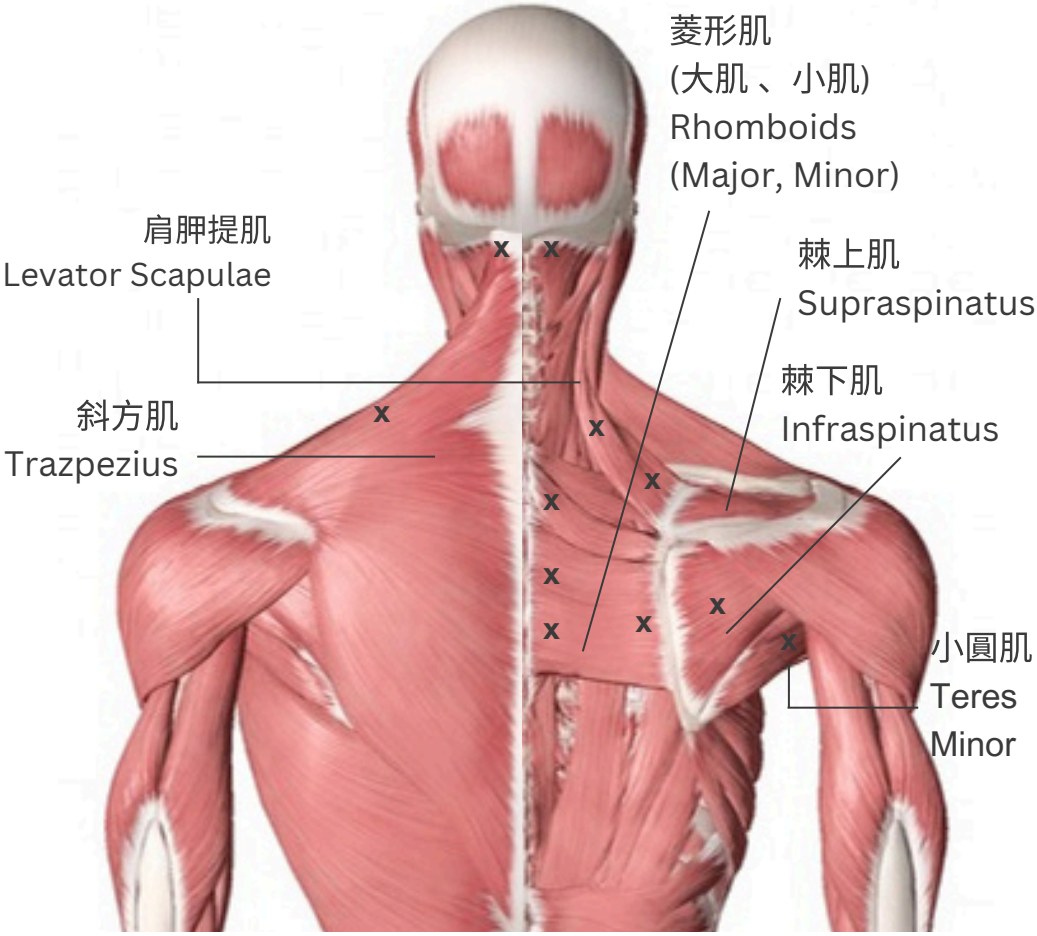
Figure 16c. Demonstration - Teres Minor / Latissimus Dorsi

肌肉解剖圖及激痛點
Muscle Anatomy and Trigger Points



前 Anterior

肌肉解剖圖及激痛點
Muscle Anatomy and Trigger Points



後 Posterior

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PREHAB + REHAB
A DUAL APPROACH

OCCUPATIONAL

DEGENERATION

SPORTS INJURY

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