Levator Scapulae / Rhomboid Strain

Description
The levator scapulae and rhomboid muscles attach the shoulder blade to the spine. With the trapezius, these muscles support the upper back.

This part of the upper back can be strained due to poor posture with computer use, phone use, compensation due to an injury, or any repetitive motion.

Symptoms
Patients complain of pain over the back of the shoulders up to the neck. Most people describe a throbbing, ache, or tightness.

Treatment (Nonsurgical Only)
Stretching and strengthening the upper back, neck and chest muscles helps relieve symptoms and prevent symptoms from returning. Anti-inflammatory medication can also help with acute flares of pain.

Exercises include neck and back stretches, lat pull downs, horizontal rows, shoulder shrugs, bench press, dips, and military press.
See Figures 1-

Each exercise should be done PAIN-FREE, and for 3 sets of 20 repetitions. If the patient is unable to do 20 reps, then either the weight or the resistance should be decreased.

Fig 1: Head Rolls. While sitting relaxed in a chair, roll head toward chest then stretching the right ear to the right shoulder (1) then the left ear to the left shoulder (2). (3) Then, gentle roll head in a clockwise circle three times. (4) Switch directions and roll head counterclockwise three times.
Fig 2: Cat Back Stretch. Kneel on hands and knees in a relaxed position. Raise the back up like a cat, hold for 5 seconds, relax and repeat.

Fig 3: Scapular Elevation, Shrugs. Stand with arms at side in straight standing posture, shrug or raise shoulders up towards ears. Briefly hold, return to start and repeat. A hand weight can add difficulty. Secondly, pull shoulder blades or scapula together in the back, hold, and then relax shoulders forward. Repeat.
Fig 4: **Scapular Protraction.** Lie on back holding a hand weight. Keep elbows straight push hands up towards the ceiling, hold, return to start and repeat.

Fig 5: **Scapular Retraction.** Anchor tubing to a fixed object and hold ends of tubing in each hand. Squeeze and pinch your shoulder blades together, pulling your arms back. Hold, slowly return to start and repeat.
Fig 6: Shoulder Dips. Support yourself in an armchair with elbows straight and feet flat on the floor. Push shoulder downward without bending your elbows. Support your weight with your legs. Hold for 3, raise and repeat.

Prevention
Taking regular stretch breaks with any repetitive activity and respecting pain can help prevent Levator / Scapulae Syndrome.

Prognosis
Patients should be able to fully rehabilitate from this injury with stretching, strengthening and activity modifications. Physical therapy can help if patients are unable to rehabilitate on their own.

Rehabilitation
See exercises / nonsur treatment