By Victoria Ross and Chuck Selvaggio

The Pfrimmer Corner presents techniques used during Pfrimmer Muscle Isolation, for restoring muscles from a compromised state to optimal health. Each issue will highlight a specific muscle or group of muscles.

Pectoralis Minor

THE PECTORALIS MINOR MUSCLE is one of the most influential muscles of the human body, as it plays a key role in stabilizing the shoulder girdle. The compromised health of this muscle can set off a cascade of problems that can result in many significant conditions, as we'll see below.

Clients suffering from the onset of problems with the pectoralis minor will present with tightness or soreness in the shoulder. As the muscle continues to grow hypertonic, the origins at the upper outer surfaces of the 3rd, 4th and 5th ribs and the insertion at the coracoid process will pull toward each other. Visibly, these clients will manifest signs of forward-shoulder projection. As the muscle becomes more contracted, the degree of forward posture will increase.

As this happens, any of the following may occur:

1. If one shoulder is affected more than the other, a compensatory torsion in the lumbar region may result. What began as tight shoulder pain will now include low-back pain.
2. As tightness in the pectoralis minor increases, neurological activity will increase in an attempt to maintain normal circulatory functions. As the rate of neurological activity increases, the client will begin to experience pain in the breast area, since the pectoralis minor can house trigger points that fire directly into breast tissue.
3. The closed, protective posture that accompanies forward shoulders may encourage the diaphragm to contract and become hypertonic. Eventually, this abnormal function of the diaphragm sets off its own respiratory and circulatory complications. An example of this type of domino effect is the client who presents with swollen ankles: This client could actually be suffering from a hypertonic pectoralis minor muscle, which in turn causes a forward-shoulder posture, which in turn causes a contracted diaphragm, which in turn inhibits the circulatory flow of the inferior vena cava—which in turn causes the swollen ankles.
4. If left unattended, what was once just soreness of the shoulder may be accompanied by tingling and/or numbness in the same area. What the client may now be experiencing is a type of thoracic outlet syndrome known as pectoralis minor syndrome. As the pectoralis minor continues to tighten, it presses on a neurovascular bundle comprising the axillary artery and the posterior, lateral and medial cords of the brachial plexus. The client may begin to feel weakness in the arm, forearm, hands and fingers, and may report increased incidents of dropping things.
5. The continued protraction of the scapula may encourage hyperkyphosis, or an excessive kyphotic spinal curve of the thoracic region.

Pfrimmer Explained

Pfrimmer Deep Muscle Therapy is the total-body corrective muscle therapy system developed by Therese C. Pfrimmer, of Ontario, Canada, in the 1940s (for a detailed description of the therapy, see "Pfrimmer Deep Muscle Therapy," Issue #74, July/Aug. 1998). Her comprehensive and highly refined technique of specific cross-fiber strokes works effectively to restore muscles and prevent various muscle/soft tissue conditions.

The study and application of Pfrimmer Deep Muscle Therapy consists of two important corrective phases: 1) The total-body sequence of general corrective strokes; and 2) The localized spot work of specific corrective strokes called Pfrimmer Muscle Isolation.

For further information about Pfrimmer Deep Muscle Therapy, contact The Pfrimmer Institute at P.O. Box 150918, San Rafael, CA 94915-0918, (888) 355-2698, or victoria@piforcmt.com

Causes

There are multiple reasons—physical, mental and emotional—for problematic conditions in the pectoralis minor muscle:

A. Prolonged forward posture that results from a state of constant stress on supportive muscles. A client who spends many hours in front of a computer, at a school desk or in a car, suffers from being in one position for a long period of time.
B. Structural imbalances, subluxations, scarring, kyphosis, prolonged slouching, over-relaxed posture and the prolonged use of crutches.
C. Women over the age of 45 who experience a weakening of the supportive lumbar ligaments often experience a collapsing posture (especially when sitting), which throws their shoulder girdle, including the pectoralis minor, into a compromised flexion. This invites a vicious cycle of further pain, bad posture and spinal curvature.
D. Clients who have been in car accidents often experience compromises in the cervical region, which causes impulses to fire down the brachial plexus, involving pectoralis minor.
E. The client may be experiencing mental and/or emotional stress. In response, the client may have compromised the flexor pathway of the anterior upper body, which includes the flexor muscles of the hands, arms, chest and neck, drawing them toward the fetal position, thereby involving pectoralis minor.
F. Clients suffering from loss, grief, abuse, low self-esteem or depression often assume closed positions in which their shoulders are pushed forward, which in turn shortens pectoralis minor and can result in compromised breathing patterns.

Solutions

During the administration of the basic Pfrimmer sequence, emphasis and focus is given to the belly of the pectoralis minor through the pectoralis major. Often, massage therapists miss the pectoralis minor muscle altogether, because a forward-shoulder posture creates a hollow in which the pectoralis minor muscle hides, even when the client is lying supine. Consequently, therapists must sometimes "scrape" the ribs to determine if the muscle needs special work. If muscle tone is found to be restricted, adhered or hypertonic, then pectoralis minor is isolated and specific attention is given (see "How To Apply Pfrimmer Muscle Isolation to Pectoralis Minor," page 88).

How To Apply Pfrimmer Muscle Isolation to Pectoralis Minor

1. Place your four fingers at a 45-degree angle to the chest on the medial border of the pectoralis minor.
2. With your fingertips, push any slack out of the pectoralis minor; then gently push across the fibers
3. Hook your fingertips for leverage when pulling back across the fibers.
4. Work slowly and deeply—but very gently—until the underbelly of pectoralis minor is clear from the ribs.
5. Circle the coracoid process to evaluate and restore the tendon attachment area.

NEXT ISSUE: Anterior deltoids

Additional support for addressing numbness and tingling associated with thoracic outlet, or pectoralis minor, syndrome would include muscle isolation work on the anterior scalenes, the pectoralis major, the subclavicus and the anterior deltoid muscles. Each of these muscles may play a part in the entrapment of the brachial plexus and associated symptoms.

Additional support for better functioning of the pectoralis minor as it relates to respiratory conditions would include clearing restrictions in the intercostals, diaphragm and serratus anterior muscles. Each of these muscles plays a part in the raising and lowering of the ribs upon which the pectoralis minor originates. The increased freedom of rib movement will discourage the need for muscular compensations and their inevitable associated problems.

Caution should be used when isolating the pectoralis minor to avoid injury to breast tissue or axillary lymphatic channels, and care should be taken in both speed and focus. The therapist should work deeply but slowly, with exacting focus on the isolated muscle. *M*

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