

SET TALK

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ACID REFLUX and HIATAL HERNIA

It's getting to the point that everybody knows what the "little purple pill" is – Nexium for acid reflux. Why? The answer is quite simple – the majority of Americans over the age of 40 has or is experiencing, the symptoms of acid reflux with a great deal of discomfort. Additionally, the advertising is alluding to long-term damage from the erosion of the esophagus due to acid reflux. Clients' fears are expanding, as is their awareness. This is partially due just to good old advertising and marketing. We as massage therapists could actually thank these people for increasing this awareness of acid reflux and hiatal hernias. However, it is unfortunate that many massage therapists do not know that there are effective soft tissue treatments that can eliminate the symptoms without drugs, or any other invasive medical procedure, and, thus, have not developed the skills to treat these conditions.

To develop the skills to treat hiatal hernia and acid reflux we must first understand what the conditions are that trigger these symptoms. Medical diagnosis include: "Protrusion of the stomach upward ... through the esophageal hiatus of the diaphragm" (*Taber's Cyclopedic Medical Dictionary*), the esophageal hiatus is "the opening in the diaphragm for the passage of the esophagus and the vagus nerves" (*Dorland's Illustrated Medical Dictionary*), "**sliding hiatus hernia**...the gastroesophageal junction and a portion of the stomach are above the diaphragm" (*The Merck Manual, 16th edition*). Another form of hiatal hernia is a tearing in the diaphragm that allows a portion of the stomach to protrude through the tear. There can also be damage to the esophageal hiatus where the esophagus empties into the stomach. When the esophageal hiatus is damaged the sphincter valve at the top of the stomach cannot function properly, and the contents from the stomach can then backflow up the esophagus (acid reflux), especially when a client is *prone* or *supine* or has a *full actively digesting stomach*. Acid reflux can occur even when there is no significant damage to the esophageal hiatus. This can be due to overactive digestion taking place in

the stomach (as can result from *spicy food* or *overeating*), or the presence of *excess stomach acid*. How can massage therapy effectively treat these conditions? Well, let's look at where the stomach is located and what the muscles are that have a major effect on both the esophageal hiatus and the stomach itself.

The esophageal hiatus is located in the center of the diaphragm. The diaphragmatic muscle attaches on the sternum, the lower ribs, and extends all the way around to the back including the thoracic vertebrae. This leaves it extremely reactive to any structural distortion. If the skeletal system misaligns, that misalignment is reflected in contractions and distortions throughout the diaphragm. The diaphragm itself is a muscle that responds to the somatic nervous system. When people are stressed, they tend to contract the muscle fibers of the diaphragm, which often exaggerates any existing structural distortions. The sympathetic nervous system (which dominates during stress) will continue to affect the diaphragm long after the initial stressor has been reduced. If this takes place over weeks or months, the resulting contractions will become fixed in the diaphragm via the fascia, and exaggerate any already existing distortions. Stress and structural distortions aren't the only conditions that affect the diaphragm. If we add extra weight to the structure, we have yet another distortion factor for the diaphragm. If the esophageal hiatus is constantly stressed by these distortions and imbalances of tension, it reacts like an "o" ring with unequal pressure on all its sides, and cannot seal effectively.

A tear in the diaphragm that allows the stomach to push through creating a hiatal hernia is equally stressed by structural distortions and the somatic nervous system as described above. If this tear is subjected to all these stresses, it often worsens allowing more of the stomach to protrude through the diaphragm. Often a tear in the diaphragm will occur when a person lifts weight when structural distortions or stresses in the body are also distorting the diaphragm. It is very possible that the tearing would not have happened had there been no structural distortion or stress.

To resolve hiatal hernia problems massage therapists need to be able to address both the structural distortions and the stresses that involve

the diaphragm. The diaphragm has surface attachments across the sternum and ribs that attach to the sternum, but the majority of the body of this muscle is deep in the abdomen and below some organs. To treat this area effectively, I recommend using the 3-step approach starting with the surface tissue and moving progressively deeper with successive strokes (*see SET TALK article on Deep Tissue, Nov-Dec. 2001, or review the article on the website under Publications*). It is important to remember to follow the principle of **“the deeper you go, the slower you go!”** You can work around and through the organs, but you must work slowly and gently, softening the points of your fingers to avoid creating a sharp specific edge that could actually damage the organs. In other words, as you work deeper in the abdomen, apply just enough pressure to sink in slowly, and only move deeper as the client relaxes and stops resisting. Once in deeply, **only move the stroke as the tissue releases.** The deeper the stroke the shorter the length of the stroke. **Do not “plow” through the tissues!**

The intent of these abdominal strokes is to release the rib cage so it can expand upward while reducing the distortion and stress on the diaphragm. The structural distortions of the diaphragm tend to pull down on the ribs. When body reading your client before the session, you will notice that the ribs on one side are pulled down and tighter than on the other. The floating rib on this side will be closer to the crest of the ilium than on the other side. To work for structural balance, you want to release this side first so you will not be moving the body further into distortion. There are other structural considerations such as pelvic balancing, lumbar curvatures, and scoliosis. However, if the diaphragm is released from the side where the floating rib and the ilium are closer together, the other structural distortions will be reduced as well. Then, releasing the other side will tend to bring the ribs further into balance, and thus release the distortions of the diaphragm.

In releasing the diaphragm you are releasing the stresses that have accumulated from both the sympathetic and parasympathetic nervous systems. In addition, when releasing the left side of the diaphragm, you will be releasing the pathway of the vagus nerve, which is usually very tightened and restricted. Releasing this often results in a calming

of the stomach and reduction in the hyperacidity found with acid reflux, nervous stomach and ulcers.

Working with your hands to release the stresses on the diaphragm will treat hiatal hernias and acid reflux very effectively. However, the treatment will not be complete until we have been able to smooth the majority of the sheet-like muscle of the diaphragm. The fingers will have worked through small areas and released ridged adhesions, but there will be larger parts of the sheathing part of the muscles that will still be somewhat tightened and imbalanced. This is where a softer, rounder surface than the fingertips can smooth and integrate the diaphragm allowing even more effective release of the esophageal hiatus allowing the sphincter valve of the stomach to close and function properly, or take the pressure off a diaphragmatic tear. I find holding a small hard rubber ball or tennis ball gently against the diaphragm under the ribs and very gently rolling it along the wall of the diaphragm to be very effective in balancing the diaphragm. *Caution* – this needs to be far enough below the ribs so as not to pull down on the ribs or in any way compromise the xyphoid process. Also, the floating ribs need to be avoided at all costs, so you want to begin medial to the floating ribs. The ball, like the hand in deep strokes, should be applied with the principle of **“the deeper you go the slower you go!”** The ball would not be effective if you had not first released the very tight ridging in the diaphragm with your previous strokes. You will be amazed at how much tension release you can feel in the soft tissue while firmly but gently using the ball to smooth and balance the diaphragm.

Clients generally report immediate improvement of acid reflux or hiatal hernia symptoms after just one session. This improvement may be reported as less pain and discomfort, less intense or fewer occurrences, or a general calming of the area. I usually work one session per week until the client is symptom free for the week, then schedule for 10 days until symptom free, 2 weeks until symptom free, and space out accordingly after that.

This work is very specific. We are not curing the condition or practicing medicine, but rather reducing the stress and distortion found in the diaphragm and its adjoining soft tissue that allows for a higher function within the esophageal hiatus and less pressure on the diaphragm itself. A

majority of my clients who have hiatal hernia or acid reflux symptoms will see the end of these problems with this treatment.

I have now included acid reflux and hiatal hernia on my intake form so that I will not miss the opportunity of helping clients with these problems.

These techniques are deep and should only be applied if you are comfortable and feel you know what you are doing in this area. I suggest that you attend a workshop where techniques like these are taught so you will be prepared to treat these problems that your clients present.

I hope the information in this article will increase your awareness of who you are as well as the healing power that knowledge gives you. Keep up the good massage therapy until we communicate again in the next installment of SET TALK.