Diaphragm and hiatal hernia

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The patient: "I always have pain and heartburn!"

We all know how much diaphragm is important, but almost no one devotes to this part of our body the attention and time it deserves.

This unique and powerful muscular layer moves incessantly up and down, just like a jellyfish moves in water. These movements (which are involuntary for most of its life) allow us to get "oxygenated" air in and foul air that is already used by our lungs and blood out. An average of 20,000 movements per day takes place to exchange oxygen and carbon dioxide in every cell of our body; in addition to this primary task, there is a second one. With each contraction the diaphragm leans down and "massages" the underlying viscera (stomach, liver, intestines, lymph tank, etc.), which draws great benefit. Even the peristaltic bowel function benefits from this "pompage", thus ensuring bowel regularity. Also the tank of the lymphatic system is compressed and then decompressed, thus emptying and filling this vesicle and therefore the circulation of this important system. When this diaphragm layer relaxes, it goes back in a passive way, pushed by viscera and abdominals, and then foul air goes out. It is easy to imagine that a small defect of the diaphragm, which repeats for billions of movements over the years, can cause diseases in muscular, articular, respiratory, digestive, circulatory, cardiac, lymph, urinary system, etc. Therefore the correct functionality of the diaphragm determines the quality of our life.



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between chest and abdomen and its peripheral part is attached to the base of the chest, within the ribs and, at the rear, on the column; that is why it is affected by a hypothetical incorrect work of the diaphragm.

This great layer is also crossed, "pierced", by the oesophagus that becomes the stomach just below the dome; also the large arteries and veins pass through it.

Although this muscle performs mechanical functions related to mere survival, it is very sensitive to any kind of emotion, problem, pain, anxiety, etc.

If you are anxious, worried, angry, it tends to stay tensed; if this state of tension lasts too long over time, then the diaphragm, instead of simply remaining tensed, will tend to settle in this state permanently. It will become retracted, i.e. blocked in short position just to avoid doing too much effort to remain tensed.

This block condition becomes irreversible; there is only one chance to get it released, through particular techniques that we will discuss below.

When the diaphragm becomes retracted, it inevitably loses some of its ability to perform its task as bellows: it is underactive.

This hypo function will cause problems not only limited to the lung ventilation, but also to the organs and systems to which it is connected.

We will now see what parts will be involved and how.

When the diaphragm stiffens and is too low (but the person does not notice it because of a lack of education in the matter, justifying any distress that they experience), the digestive system is immediately involved. The stomach is "pressed" instead of "massaged"; hence the famous saying "I have a brick in the stomach."

The liver is pressed and the same phenomenon affects intestine, bladder, inner genital organs. In some cases urinary incontinence is caused by diaphragm pressures.

This pressure on the viscera, in some cases, can make difficult the going back up of venous blood and lymph from the lower limbs, causing venous and lymphatic stasis, especially with the heat. Moreover, the chronic lowering of the diaphragm may cause significant cardiac tensions. You have to consider that the shell of the heart, the pericardium, is intimately connected with the diaphragm, even merging with it. When the diaphragm is tensed, the heart suffers from an annoying tension that becomes pain that from under the ribs can reach the neck. When the diaphragm is adequately treated and brought up in its place, such disorders reduce and disappear. We cannot forget the pathologies of the spine caused by the tensions that the diaphragm exerts on the lower back and on the cervical spine through the respiratory muscles. Now we will see in detail how **hiatal hernia** develops and how it can cause gastroesophageal reflux.

When the diaphragm moves downwards in a inadequate way, even before pressing the stomach, it fractionates the lower oesophagus, i.e. the part of the digestive system which is immediately above the stomach. If the diaphragm, because of additional stressful tensions, increases its tension and falls even lower, its traction on oesophagus and stomach becomes excessive and, at this point, a part of the stomach that is too "stretched" slips over the jatus, i.e. the hole of the diaphragm through which the oesophagus goes: in this way a part of the stomach becomes hiatal hernia.

The valve called cardia, located at the entrance of the stomach, has the task of preventing food to go back, especially if you lie down after eating. This valve partially loses its function, since a part of the stomach has moved above the diaphragm and has no longer the power to hold back the food. In addition to the discomfort, the tension feeling, you also feel the discomfort of gastroesophageal reflux. By using a special postural technique, it is now possible to restore elasticity and freedom to the diaphragm to reduce or eliminate this disorder; it is the case that we will now see.

Paolo turned to our studio for a problem of posture and muscular stiffness.

During the anamnesis he says: "In addition to muscle, neck and shoulder disorders, I always have digestive problems, stomach pains, and reflux. I have already been operated on once for hiatal hernia and I would like to avoid another surgery."

Immediately after surgery, symptoms were gone, but after almost three years he began to suffer from the same symptoms he had before surgery: heartburn, gastroesophageal reflux, postprandial-bloating feeling, and some heart pain.

His doctor told him that, given the high relapse rate in patients operated on for hiatal hernia, another surgery could not offer guarantees of a more lasting result than the previous one. He also told me that because of his job, he was subject to frequent business trips and to high levels of stress.

The postural analysis showed a tensed and stiff body and by listening to the mobility of the diaphragm, a high level of rigidity was shown.

Through the method we use in our studio, all exercises are strictly done in decompensated posture to ensure that the main muscle chains involved are put into tension and can thus "show" the life of the person. We started with respiratory rehabilitation exercises and soon after with a specific manoeuvre for the release of the diaphragm (see photo below).



At the end of that session he told me that he felt a "more open chest", freer breathing.

Thus, in the first three sessions, exercises were focused on the diaphragm, each time more intensely.

At the fourth session the patient told me that he was already feeling much better: more freedom in breathing both by lying down and by standing, less tension on the stomach, less acidity. He could not remember the last time he felt so well. Building on the results, we then began to treat also the neck and all other rigid parts.

At the tenth session, the improvement was everywhere: benefit to neck, shoulders, back, and above all he no longer felt reflux, stomach and chest pains. He was also able to play a bit of sport again.

We have to say that during the sessions Paolo collaborated in an exemplary way: every day at home he did breathing exercises and self-massages to the diaphragm that I had taught him during the sessions. The purpose of these home exercises was to maintain the benefit condition achieved so that he could handle the daily stress of his job.

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