Shoulders and diaphragm

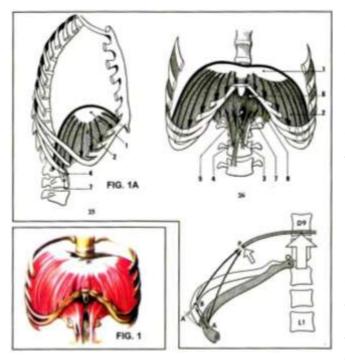
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"You can't heal the shoulders if you don't heal the diaphragm" Françoise Mézières

The patient's experience: "I avoided a surgery for my blocked shoulder thanks to the posturologist's work on my diaphragm!"

It is constantly working, every day of our life, every time we breathe, and we barely know that it exists. The diaphragm is the protagonist of our breathing. Let's describe it again: it is between the chest and the abdomen and it is shaped like a vast asymmetric dome (figures 1 and 1A). It is made of muscular tissue and therefore it is subjected to the same laws of all muscles: over the years, stress, prolonged tensions, inadequate physical activities, anxiety and anguish have an effect on the diaphragm. It stiffens, retracts, and shortens. After being forced to get closer, its extremities are not able to extend again. The



dome will than result shorter and tenser compared to its ideal condition and consequently its ventilator capabilities will be compromised and modified. This alteration will have other effects on different levels. Several organs and body areas are directly connected to the diaphragm, and they could suffer from pain and other problems.

If the diaphragm is tense and retracted, it will loose a part of its power and it will also constantly compress the stomach, disturbing its functions. It could even cause hiatal hernia. A retracted diaphragm will also compress the whole digestive system. The abdomen

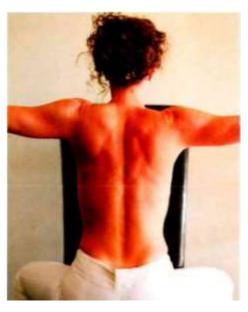
compression can provoke congestions, which can cause problems of blood circulation. The lymphatic system could be affected too, because of the lack of compression and decompression on the cisterna chyli. Diaphragm is strictly connected to the heart through the phrenopericardiac ligament. When the diaphragm is tense, it leads the ligament to lower and can cause unpleasant disturbances in the cardiac area (annoyances, tension and pain).

The diaphragm could affect the wellbeing of the spine as well, through its strong pillars at lumbar level. The spine compression can cause discopathies in the future.

The main problem brought about by diaphragm malfunction is poor breathing. This causes the shoulders and neck muscles to work more than they usually do. When our breathing is insufficient, because of an intense physical effort such as running, etc., our body activates some mechanisms to help during the crisis, and some muscles have to work more. If the emergency lasts for too long, the extra work done by neck and shoulders muscles is going to cause damages, provoking compression and crushing of the cervical section.

The compression of cervical vertebras can be responsible for several problems of neck and shoulders: arthrosis, protrusions, shoulder pain, cervicalgia, cervicobrachial neuralgia, etc.

There is a well-known aphorism by Françoise Mézières, the French physiotherapist of the 1950s, in which he states that you can't heal the shoulders if you don't heal the diaphragm. This is extremely true at scientific level, and it is one of the foundations of posturology. This principle is very useful to prevent or heal shoulders or neck problems through the diaphragm, as in Antonella's case, which I am going to present now.



Considering all this information, we can all agree on the strategic importance of the diaphragm and of a proper breathing as the key for our physical wellbeing.

In the last years is has been discovered and confirmed by scientific researches and patients treatment that diaphragm can be trained and healed, and that it can recover its functionality.

There are some specific treatments that can be done on malfunctioning diaphragms, in order to recover a correct posture and its full efficiency, using the method of Global Non-Compensated Muscular Stretching.

Let's now analyse a true case, which could help you in better understanding what I have just said. Miss Antonella, 48 years old, came to visit me because of severe joint pain. The doctors told her that her right shoulder needed surgery to reduce her tendon lesion. In August 2003 her pain and her difficulties of movement became so severe that she avoided surgery only thanks to her determination in finding another solution. When she told me something about her condition, she also told me that her students made fun of her, mocking her because she had problems in moving the arm to put her coat on.





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I immediately noticed that she suffered from a high level of stress. Antonella herself told me that, on a scale from 1 to 10, her stress level reached 11. I thought that her diaphragm must have been extremely tense. I observed her breathing and I noticed that she was breathing using her chest (the typical breathing of the people who always use neck and shoulders muscles to breathe) and in her chest there was an extremely visible block provoked by stress and anxiety. I verified her diaphragm condition and I had the final proof to confirm my suspects. I put Antonella in a correct posture (fig. 3) and I followed Mézières principle: the cause cannot be found in the place where the pain, i.e. the effect, appears. I began with some manual techniques to unblock the diaphragm, which was not an easy thing to do. At the end I massaged her neck (fig. 5), which was extremely tense.

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I decided not to touch her shoulders because I wanted to verify if her diaphragm was the cause of her pain. When she stood up, she immediately noticed that her pain had reduced and she could move more easily. She was able to put her coat on with no problems. She could not believe it, and with a satisfied expression she told me: "Just wait until my students see me!".

The following week I saw Antonella for our second treatment and she told me that her pain had diminished and her condition had improved: less pain, less movement limitation. For this reason, I decided to follow the same treatment scheme of the first visit, working on her diaphragm and neck. At our third meeting she was feeling better, her condition kept on improving and she told me that she had tried to make her shoulder work more just to prove the efficacy of the treatment. She had done some gardening and she felt no pain. We agreed on the fact that stress leaves you breathless!

It is important to underline that sometimes shoulders problems can be caused by neck disturbs, malocclusion, or temporomandibular joint clicking (the noises that can be heard near the ear when opening or closing the mouth). In these cases the posturologist needs to determine whether the patient

should go to the dentist's or if it is necessary to relocate the temporomandibular joint before working on teeth problems and annoyances provoked by prosthesis.

In other cases the cause can be found in muscular, connective or fascial chains. There are specific texts that can help the therapist finding the first cause and a proper solution for shoulder pain, impeachment syndrome, and periarthritis humeroscapularis.

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