

Periarthritis and postural imbalances

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A slight shoulder pain every now and then, sharp pain when doing some movements, in different parts of the body and never having the same intensity – these are usually the first symptoms of scapulohumeral periarthritis. The expression itself – peri-arthritis – indicates an inflammatory (-itis) process affecting the tissues (e.g. serous sacs, tendons and connective tissues) around (-peri) the shoulder joint. We usually ignore this part of our body unless we feel pain or in case it prevents us from doing some of the several everyday life movements. This article is aimed to explain better how the foresaid joint is structured and how it works.

It is the most mobile joint of the body, it allows people to move in every direction and at any space level, and it is made of three bones: scapula, clavicle and humer. The **first two** bones work like the suspension arms of a Formula 1 car (allowing little movements from the chest) while the **humer**, the bone of the arm, moves thanks to its spherical head in the glenoid cavity. This special structure allows wide possibilities of movement despite its stability and integrity. This joint, not strictly limited by fixed bones, is actually related to different parts of the body (neck, back, lumbar region, forearm, hand) through several muscles.

During the evolution of the species, when the human kind changed from being quadruped to biped, shoulders changed their role, focusing on catching and bringing near the body, mainly catching food; their task is to take and support heavy things instead of being charged with the whole body weight as it happens in quadrupeds.

This is the reason why the anatomic joint relation between scapula and humer (humeral head and glenoid) is lower compared to the hip one, which has the same principle (though having to support the whole body weight). The shoulder stability relies on articular caps, on the ligament connecting the humeral head to the scapula, and on muscles tendons that cover the shoulder and allow its movements.

The whole musculature involving the scapula, the clavicle and the humer plays a main role not only for giving stability and movement, but also within the insurgence of inflammatory and comprising

pathologies. Muscles connect the shoulder to the neck, the arm, the chest and the lumbar region, as in a round-about with many entrances. All muscles determine the rhythm of our movements – every single muscle activating in a precise moment – but if one of them is lacking of rhythm due to an over-tension (e.g. a distorted posture giving a wrong position, a neurological element), then the rhythm is modified and – back to the roundabout – it may cause traffic congestion and accidents (which in our body means blocks and pains).

Shoulder joint is then free to move at every level of space: in order to remain free it connects with every part of the body and can support every issue thanks to its muscle connections.

It is necessary to underline that our body muscles are organized into chains – they behave as if they were a whole. Taking as an example the ring of a chain, if a single muscle suffers from a trauma or a functional overcharge, it inevitably tends to tighten, to defend itself responding to an innate physiological defence mechanism that results in excessive tension and the modification of the whole muscular chain tone.

Another factor to pay attention to is the so called “*analgesic* law of compensation”: in front of a pain caused by a trauma, a particularly stressful situation, visual problems, swallowing, breathing, occlusion, visceral troubles, the body starts limiting or avoiding the painful movement ignoring the postural aspect, shifting the lost movement in the joint areas of the body, which are still available to “substitute” the painful area. These areas, though, being overcharged by the strong labour required, will show troubles, diseases, inflammations and pains. This is

why even a shoulder without traumas may start suffering without any visible reason.

The following example will make the foresaid statement more real: imagine a worker using a screwdriver for many hours a day. In a little time his forearm muscles will result overcharged with work and this



may bring troubles to his wrist. If the foresaid worker does not stop working and start treating his problem, he will have to overcharge his elbow joint in order to continue working with less problems: this situation can bring to diseases such as epicondylitis (known as “tennis elbow” often occurring even to people who have never played tennis at all) or epitrochlear nodes. At this point in order to continue using the screwdriver he will have to lighten his wrist and elbow and start using his shoulder, though with a stronger effort. If this analgesic-vicarious system lasts for too long, then shoulder and neck as well could show inflammations of pains.

The foresaid example exactly reflects an important aphorism from the French therapist F. Mézières saying that when a pain shows up it is not the cause that is showing up, but its effect.

If the pain is to intended as a signal, as an alarm bell of something creating unbalance, it is not proper to start treating or inhibit the pain to the shoulder itself: it is like a warning light on our car dashboard telling us that something is wrong and it is necessary to intervene. Of course the intervention will not be made on the warning light itself, but on the part the light represents. As regards the shoulder pain, the posturologists job will be investigating and building the route the pain has gone through before showing on the shoulder, using a special technique which will lead to discover where the actual problem is.

It is necessary to reconstruct the history of the patient's pain in order to discover whether the cause is to link to an old trauma or depends on wrong athletics movements or repeated for long time (e.g. sports such as launches, volleyball, tennis, etc.); whether it depends on bad working postures, (e.g. clerical work, using the mouse along with a non-ergonomic position, with a consequent overcharge of the upper limbs for many hours), or on troubles reaching the shoulder and coming from other areas which suffered from traumas. The shoulder pain, may it result strange, is probably due to breathing troubles. Speaking of, F. Mézières stated that "the diaphragm cannot be free to move". During the investigation it is important to include also visual, occlusal, swallowing tests, tests of the temporomandibular joint, of the visceral tension. All these verifications are important in order to discover whether the cause of the shoulder pain is connected to one of these areas or not.

This is why it is important to build the history of one's traumas, of one's pain and possible pathologies apparently not connected, in order to act first on the irritative thorns reflecting then on the shoulder. In such situations if the shoulder is treated directly, the therapy could have no effect and last for a limited time.

Let the patient talk: "When I carry shopping bags I suffer from shoulder pain. This periarthritis is driving me crazy."

Daniela, 53 years old – employee in an accountancy office; she decided to turn to our studio claiming for a persisting pain in her right shoulder along with a limitation in her movements. She had been suffering from that problem for several years, but recently it began to hurt more, so much that she even struggles with carrying light shopping bags. Being at work increases her pain, due to the continuous use of the mouse. From X-rays and MRI no problem emerged that could explain such situation, and her doctor diagnosed a *scapulohumeral periarthritis*. The pharmacological therapies she had been undergoing (firstly infiltrations, than anti-inflammatory ones), only had a temporary effect as it happened with the various massages to her shoulder, back, and arms.



In order to understand the nature of her pain, it was necessary to rebuild her history, her traumas, her wrong postural habits, and undertake some tests on her visual and masticatory system.

Daniela tells us that 20 years before she suffered for a short period from a neck ache on her cervical spine and some years before she also suffered from a bad trauma in the sacrum-coccygeal region after having slid on ice: her backside still hurts when the weather changes.

Retaking the analgesic law of compensation, the postural accommodations that followed that trauma could have been affecting the **cervical region** as well, and consequently disturbing the whole functionality of her upper limb, being the shoulder connected to it.

The postural evaluation shows a very contracted lumbar and sacral musculature as if she was still defending herself from her falling, and her head is not well aligned. Even the functional tests highlighted a reduced mobility either in the lumbar or in the cervical region, while the shoulder is able to execute just little movements without suffering.

Other tests excluded visual, masticatory and digestive system as involved parts. She did not have any scar that urged attention.

We started with balance exercises aimed to restore the muscular tensions of paracoccygeal and sacral muscles: as usual, every movement or postural technique is followed by a test of the pain or the limb mobility before and after having executed the movement or technique. Daniela surprisingly noticed that her arm mobility had slightly improved without her usual pains, despite the posturologist had not worked directly either on her arm or shoulder.



During the next session the patient told us that the slight improvement achieved lasted the whole week; thus the second session was intended to suggest the same therapeutic issue again, adding a treatment for the cervical region with a posture of “*global non-compensated muscular stretching*”, which aim was to loosen the tensions coming from her neck and reaching her shoulder.

After some sessions her shoulder mobility had improved and her pain diminished: the following sessions were intended not only to insist on the previous protocol, but also to add several new decontracting and muscular stretching exercises, executed with a decompensated posture for her arm, in order to re-balance her stress due to the long usage of the mouse.

After 12 sessions, Daniela confirmed she did not suffer either from pain or functional deficit anymore, both using the mouse and carrying weights and shopping bags.

For more information on the Raggi Method®- Pancafit® please address to Posturalmed S.A.

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