Hip arthrosis
A posturological proposal

Authors:

*prof. Daniele **RAGGI***
Degree in Sport Science, Physiotherapist, Posturologist, Mézières practitioner.
Lecturer in Posturology c/o School of Medicine (Department of Experimental Medicine and Pathology), Università "La Sapienza" in Rome and c/o School of Sport Science, Università Cattolica in Milan. Director of Posturalmed (Posturology studio) in Milan.

*prof. Gloria **MAJOCCHI***
Kinesitherapist, Degree in Posturology c/o Università "La Sapienza", Rome.

A continuous excessive tension inside the joints can cause over the time a cartilage degeneration and the beginning of the arthrosic process. Therapies and remedies with Pancafit®.

There are always more people who at the age of 40 already suffer from pain in the groin or in the hip joint. They undergo x-ray and they are often told worrying commentaries. For instance, if x-ray shows a "reduction of the articular rim", the doctors tell them "let's try to put it back, then a prosthesis will be necessary". If x-ray shows an already begun arthrosic process, instead, they say "there is no much time left, it is time to think about a prosthesis".
In both cases, anyway, what it is suggested to do meanwhile is to strengthen, tone up, move, do exercise on a stationary bike, etc., in order to reinforce the joint. Although the patient says that the hip is painful when it moves, the suggested actions are movement and strengthening.

Why does this contrast between science and nature take place? Why in case of cartilage usury or a real arthrosic process all it is prescribed is to strengthen and move, whereas the body intelligence or its instinct of preservation in case of pain tends to reduce the movement? Who is right? Is there a chance of "natural" intervention in order to restore the articular function?

Let's start from the beginning: What is arthrosis?
Arthrosis is a degenerative process affecting the cartilages of the articular heads relating each other inside an articular capsule, which acts as a protection. The aim of the cartilage is to maintain a facilitated and minimum friction, and articular capsule usually contains a lubricating liquid that keeps the cartilage surface unaltered. If cartilage wears out completely, such process might reach and damage the skeletal tissue, too. That is why movements will result reduced and painful, until the complete inability to move and the possible fusion of the articular heads.

But why does cartilage, which has been created by nature to last at least a hundred years, wear out in such little time instead?

Evidently, the present society presents some aspects that are causing serious damages to our muscular and articular system. Our life style, together with an accelerated technical development, led to a far higher dose of stress than in the past. Stress is a muscular hyper tension and our muscular tension threshold varies according to the external inputs. This is the reason why we have all become tenser and people are not able to relax anymore, to breathe with no anxiety, to let oneself go a little bit.

Hyper tone, favored by traumas and habitual bad postures, reflects of course on the joints. As a matter of fact, any physical trauma translates into a tension for defense, which if lasts for too long, becomes a muscular retraction, i.e. shorter and tense muscles making us become every day a bit more stiff and tense, too, until we get shorter in the old age. So the action of retracted muscles are real coaptations we force the joints to undergo any time we move, and keeping moving in these conditions, an inflammation and a slow but continuous usury of the cartilages will develop.

Although today it is known that the body can reconstruct cartilage thanks to infiltrations and through growth-stimulating drugs, nobody thought that it is impossible to reconstruct cartilage where there is a constant compression and destruction of the little left. It would be like hoping that a scar heals over when we open the wound again by taking off the scab the body had created trying to repair the lesion.

The body is therefore right when it tries to reduce the movement in order to reduce both the pain and the cartilage destruction. Facing such lesions, it is not possible to ask the patient to tone up the muscles and to do movement. On the contrary, first of all it is necessary to loosen the tensions inside the hip, since at any attempt to move they consume the existent cartilage. Hip balance and stability are granted both by the deepest ligaments and by the various muscles allowing the movement in any direction, which, anyway, get short and become responsible for cartilage destruction and arthrosis.

Let's see the muscles directly involved in this process:

HIP FLEXORS	**HIP EXTENSORS**	**HIP ABDUCTORS**	**HIP ADDUCTORS**	**EXTERNAL ROTATORS**
psoas, iliac	gluteus maximus	gluteus medius	great adductor	piriformis
sartorius	biceps femoris	tensor fascia latae	internal rectus	internal obturator
anterior rectus	semitendinosus	gluteus maximus (the most elevate fibers)	semimembranosus	external obturator
tensor fascia latae	semimembranosus	piriformis	gluteus maximus	quadratus femoris
pectineus			quadratus femoris	pectineus
medius adductor			pectineus	gluteus maximus
rectus interior			internal obturator	gluteus medius

			external obturator	
			medius adductor	
			adductor minimus	

The periarticular muscles can contract for defense after a direct trauma, but at the same time they can also create periarticular tension as an effect of the muscular chains, which transmit tension in every part of the body if one or more of their rings become retracted or act an antalgic defense mechanism. The weakest point or the most compressed point of the skeletal system will pay for the consequences, one for all arthrosis.

This mechanism of muscular, fascial and connective chains is still being studied in posturology, which related all the main information receptors of our body system (eyesight, digestive system, vestibular system, feet receptor system, etc.) to the antalgic adapting tensions of the musculo-articular system.

It is especially thanks to the mechanism of the muscular chains if also muscles apparently not involved act in favor of the pathologies having compressive origin.

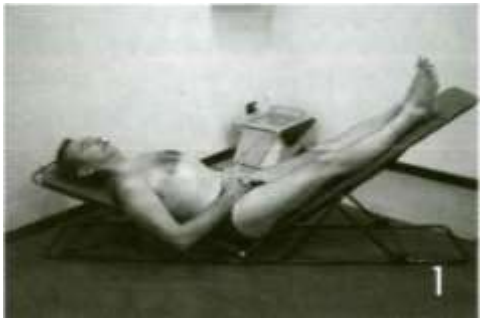
A simple example comes from the diaphragm, which, with its powerful pillars, arrives to the lumbar region, where it forms together with psoas muscle, with which it is strictly connected, a unique “arm”. This strict connection will transit to the hip the diaphragm problems through the psoas; it is how an emotional stress through the diaphragm will act negatively on the hip.

It is therefore necessary to do exercises of articular decoaptation, acting through the stretching of the main muscular, fascial, connective chains. When we observe a patient standing, feet united, and we note that the glutei are not able to decentralize and they present a lateral dimple, it is an already alarming point. That gluteus does not relax anymore, so it behaves as if it were the forgotten hand brake in the car, causing a major resistance, more friction and consumption of fuel and brake lining. That constant and excessive tension inside the joints will cause over the years cartilage degeneration. It is the beginning of arthrosis. It is necessary in these cases to **work on the stretching, not only of the involved muscles, but on the muscular chains in general, through a “global non-compensated muscular stretching”**.

Global and **non-compensated** refer to that way of doing stretching that takes into consideration the muscular chains, in other words that does not allow the body to act antalgic compensations during the stretching.

A manual or physiotherapy intervention acting only on the painful area cannot give fixed and long-lasting results, since these arrive when the retractions responsible for the coaptations will be solved entirely.

Observing the pathology in a global approach, in fact, we could discover that an articular coaptation of the joint developed due to a problem coming for example from a shoulder or a foot. The pain caused a reduction and limitation in the movement.



The first exercise we propose (figure 1) acts through a global approach on the posterior muscular chain thanks to a specific tool, Pancafit®, which allows varying the working angles according to the subject's conditions. From now on, it is better to do exercises that start from the feet (always in a correct posture by keeping the posterior muscular chain in tension) – see figure 2. Often the exercises done on the feet help remarkably the mobility of the hips and reduce the pain. This happens because if the feet have become stiff, their reduced movement over the years can have led to a compensation of hyper-movement of the hip and consequently to tensions and inflammations.

Related to a reduced mobility and tension of the directly involved muscles, also myofascial and connective massages are useful, both superficial and deep, in order to give more freedom to the muscles. The muscles and therefore the sarcomeres, which have been fixed by the connective tissue, are in this way helped in restoring their original length when they are in a condition of global stretching and in a correct posture.

As it is shown in figures 2, 4, 5, 6, all the muscles involved in the hip functionality are taken into consideration and treated. Session by session, the therapist goes on with the technique in order to set the hips free from coaptation, acting on the

global non-compensated muscular stretching of the internal and external rotators of the hips, adductors and abductors, flexors and extensors (see figures 7, 8, 9).

It is extremely important to proceed gently, respecting the patient's conditions.

Any singular point needs to be considered. For instance, the sacrum has to remain in contact with the back side of Pancafit®. Breathe has to be always unblocked in order to avoid diaphragmatic and lumbar lordosis. The ASIS must never go up or in retroversion. The thorax and the gluteus have to stay relaxed. The shoulders must not move upwards or forwards, etc.

With this kind of approach, usually after 3-5 sessions notable changes can be seen: mobility improves, the pain reduces and so also the will to move increases. The sessions last about an hour and are made once a week. When it is possible to move on to the next phases, it will be possible to increase the intensity of the proposed work integrating it with numerous exercises, certainly interesting and above all functional, that the patient in many cases can do alone at home, always maintaining a correct posture, for which Pancafit® results essential.

Be careful: it is important to understand and evaluate what has been said so far, so not to propose the patients exercises of muscular tone up in the hips and in general (effect of the muscular chains) since they are incoherent with the fundamental mechanics of coaptations and arthrosis process.

Many patients treated with this method have completely restored their original functions with no more pain, limitations, and in the worst cases, prosthesis. The method, based on a correct posture and on the restoration of the original muscular length through the global non-compensated muscular stretching, is proposed to therapists of various courses and different levels of professional preparation. It is also used with patients who underwent surgery for the implantation of the prosthesis, to accelerate and improve the recovery and functionality.

For more information on the Raggi Method®- Pancafit® please address to
Posturalmed S.A.
Tel. +39 0239257427 or +39 0239265686
- Fax +39 0239200420
Email: corsi@posturalmed.com
Website: www.posturalmed.com