

REVITALIZATION THROUGH PLATES, PRP: Latest updates about the techniques and its uses

Revitalization through plates starts to be well known. Lately we were able to obtain the needed authorizations for a complete safe use.

The use of **PRP, Platelet Rich Plasma**, is a treatment discovered after numerous studies that documented an important action of rejuvenation of the growth factor in the platelets.



In fact, if we think about it, the mechanism that allows the repair of cutaneous tissue is hidden and explained in the platelets and especially in its growth factors that allow a stimulation of the cells (fibroblasts in particular) that reconstruct the skin.

If injected in the tissues they have a visible action of turgidity, important hydration, total rejuvenation of face, neck and décolleté.

But it is perfect also for hands, arms and where the patient needs to start a process of reparation.

We can easily understand the procedure and why it has been so efficient if we ask ourselves a simple question: why can we fast regenerate skin after we fall, and regenerate it perfectly as it was before with a "restituito ad integrum", which translated from Latin means a perfect cutaneous reparation?

This is because the platelets first stop the blood when they are still integer starting the coagulation, and then when they fall apart, they release particular substances that allow, together with other sophisticated mechanisms, a reparation!

In fact in the plates, there are important granules which contain factors that allow the chemotaxis of macrophages, which are the sweepers of injuries, the growth of blood vessels, and at last the proliferation and the migration of the fibroblasts with a great production of collagen.

With the use of autologous platelets (the ones of the patient) injuries heal faster, the diabetics ulcers of the legs highly improve, but also the phlebo static ulcers benefit from it.

For this reason, we notice a great improvement after invasive procedures, for example after a fractioned laser of the face: the recovery is quicker, sometimes even after 4 or 5 days (and I am talking about lasers that were difficult only few years ago), but it seems that the final result is better even if we need to wait for more exhaustive scientific studies to have a definitive vision.

With other colleagues, I lately published an interesting scientific articles (**Journal of Drugs in Dermatology**) that can be read on the journal's website. Here it is the bibliographic reference (the abstract is free on the scientific part of the website):

*A. Redaelli et al: **Face and neck revitalization with platelet-rich-plasma (PRP): clinical outcome in a series of 23 consecutively treated patients.** Journal Drug Dermatology, May 2010, vol 9, issue 5, 466-472*

How is the treatment done?

The treatment is very easy to do: we take 20 cc of blood from the patient.

Then, after few minutes of centrifugation, the plasma, which is rich of platelets, (scientifically called thrombocytes) is divided from the other cells of the blood, red and white globules, which do not have an important role in this field.

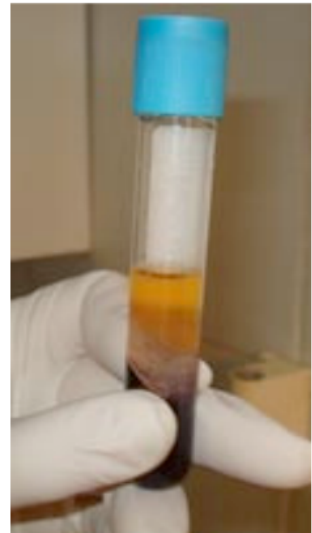
We have to highlight the fact that it is important to use sterile kits that allow an absolute safety of the patient. They are expensive and that is why they determine the cost of the session.

In the picture it is possible to see the test-tube dedicated to this particular treatment with the separator (transparent), which separates the corpusculated cells (below), plasma and platelets (above).

The plasma rich of platelets is taken and the platelets are concentrated and then activated with a particular activator (the calcium chloride that has the aim to expose the growth factor) and immediately reinjected in the patient. There is also the presence, even if it is not much, the stem cells that have surely a not so well-known but safe action..

It is not a treatment with filler, but a biorevitalization and a stimulating treatment.

We advice the patients not to expose to the sun on the day of the session and in the following days, but no other precautions are needed.



In the picture here above it is possible to see the used syringe, the needle is extremely thin and the plasma with the hyper concentrated platelets.

Are there any risks?

If the technique is precise and uses the prescribed materials, there are no risks for allergies: it is a material coming from the patient's body. All the tools are disposable, and particular kits that avoid any contamination are used, they are open when they need to be used and then thrown away.

Small haematomas might be possible, as all the other injective treatments, and also a light swelling, that goes away few hours after the treatment.

How many sessions are needed?

The protocol has been already standardized: one session per month for the first 3 months, and then a session after six months.

Then, the patient sees the doctor for a new session every year.

What results can we expect?

The results are not immediately visible, but after 15 days the patient notices a gradual swelling of the tissues. The skin and the derma are more tonic and compact. Even the external look seems to improve: the skin has a better and healthier color, and the filling improves.

Obviously as for every other medical treatment, there are patients who respond very well to it and some other who do it in a different way.

However, everything is done with no risk.

Are there any interesting news about the treatment?

Yes, I have to say that lately a very extensive use in all the aggressive therapies, and in particular after the use of the CO₂ fractioned laser, is due to the great reduction of follow up, of the recovery post-procedure. The hyper concentrated platelets are brushed on the lesions produced by the laser. This allows the organism to heal faster and the results of the laser are definitely better.

Any advice?

In general, I would suggest addressing to qualified doctors, and distrust, as I always say, cheap treatments: the costs at the origin will not justify it.

Beside, I would avoid doing the treatment in only one session: results are good, in revitalization, only after three sessions.

I would say that today there is not way to execute an invasive procedure as laser and peeling without the use of PRP: in this case the improvement of results, with inexistent risks, is very remarkable.

Can this treatment be associated to other aesthetic or medical treatment?

Absolutely: any aesthetic medical treatment, from filler to revitalization, from botulinum toxin to peelings, can be usefully associated and in general they have a powerful action together.