

## PRP (platelet-rich plasma) und Mesotherapie

### About mesotherapy and PRP

The concept of mesotherapy includes all treatments that aim to improve skin quality and hair growth. PRP is one of the treatment methods. It is popular due to the fact that the patient's own blood, or more precisely the blood plasma, is used. The term "vampire lift" is somewhat misleading, as no actual surgical "lifting" (rhytidectomy) is performed. The treatment stimulates the regeneration of the skin and the hair follicles, but has no lifting qualities.

The injection of vitamins, amino acids and antioxidants and/or needling are further options for mesotherapy. A combination with PRP is particularly helpful for the treatment of the face or décolleté.

### PRP is the abbreviation for "platelet-rich plasma"

For the preparation, a blood sample of approx. 25ml is taken from the patient. This autologous blood is then centrifuged so that about 13ml of plasma is produced in the upper part of the sampling vessel. This plasma contains the thrombocytes, colloquially known as platelets. The lower part of the vessel collects red blood cells, which are not used for treatment and are therefore discarded.

Many companies offer PRP systems. I opted for the [World-PRP®](#) system, because high concentrations of platelets can be achieved. Compared to whole blood, the platelet concentration increases by five to eight times. This concentration is achieved because the upper, weak part of the plasma is discarded and only the lower, highly concentrated part is used for the injection.

Platelets are actually responsible for the first step in hemostasis after an injury. In the healing process after a cut, for example, they release a large number of growth factors and thus promote tissue regeneration. In clinical practice, PRP is used to improve healing in bone or skin transplants. This regenerative power is also used in aesthetic medicine to stimulate skin or hair follicle growth.

### PRP can improve skin quality on the face, neck and décolleté

Initially, it is recommended to have 2 treatments at intervals of 2 weeks. The results become visible only after a month and last about 3 months. After that, 1 to 2 treatments can be performed at intervals of 3 months. The skin develops more shine and collagen fibers through treatment with PRP.

### PRP is a treatment option for hair loss when the hair is thinning but there are still functional hair follicles in the scalp

Platelet-rich plasma is a suitable treatment for androgenetic alopecia (AGA). This term describes the hair loss that usually begins with adulthood and proceeds according to a [typical pattern](#). Its progression varies from one person to another. First, the hair begins to thin out on both sides of the forehead where the hairline recedes. Next, the back of the head begins to lose hair. These areas expand and merge. Men are more often affected by androgenetic alopecia, but AGA also occurs in women with a slightly different pattern of progression. Usually, there is a genetic component.

It is important to recognize other types of alopecia, e.g. alopecia areata, alopecia associated to lupus erythematosus, syphilis, HIV, polycystic ovarian syndrome and other hormonal disorders, alopecia associated to chemotherapy. Iron deficiency and thyroid disorders can also be the origin of hair loss.

A small blood test (ANA, TSH, ferritin, CRP, ALAT) before PRP application is recommended in order not to miss other causes of hair loss. Supplemental intake of iron and B vitamins may help.

Men can complement their treatment with a 5 $\alpha$ -reductase-inhibitor such as Finasterid® or Dutasterid® (both are prescription drugs, off-label use). However, these drugs should not be taken by women. Minoxidil is a topical treatment applied to the scalp and is licensed for both men and women, at a strength of 5% and 2%, respectively.

It is necessary to perform at least 3, or even better 6 to 8 treatments with PRP. The results are visible with a delay of about 4 to 8 months. After that, 1 to 2 treatments should be performed every 3 months for maintenance. A vitamin supplement can be added during the injection.

Head areas where hair has not grown for a long time will not develop hair growth even with PRP. In these cases, a hair transplant is the only option, apart from hairpieces.

**Another method of mesotherapy is the injection of vitamins, antioxidants and amino acids, with or without hyaluronic acid**

Different products are available with a variety of the ingredients mentioned above. The injections can be performed on the entire face, maintaining a safe distance from the eyes. I mostly use Redensity I by Teoxane®.

“Needling” is a further technique for mesotherapy. It involves countless superfine skin punctures at a depth of only 0.6–1.5mm which stimulate skin regeneration and collagen production.

Please note that the PRP treatment is currently only available in the cosmetic institutes in Baden and Brugg. Because a heavy centrifuge is needed to produce the PRP, I cannot offer this treatment during a home visit.

