

# LOSS SCAR BY EASY WAY AND GREAT OUTCOME !!

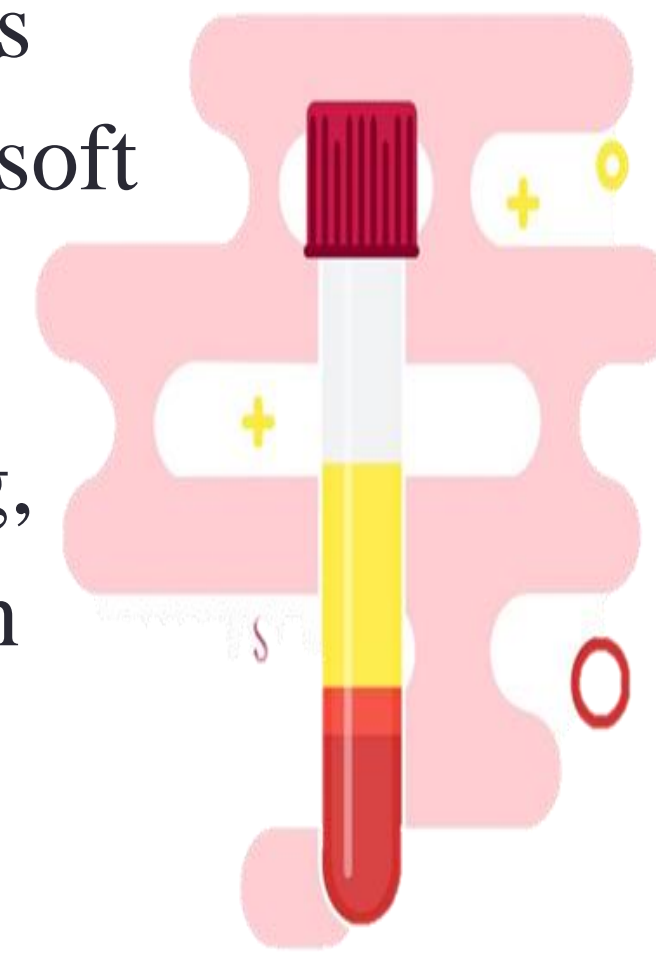
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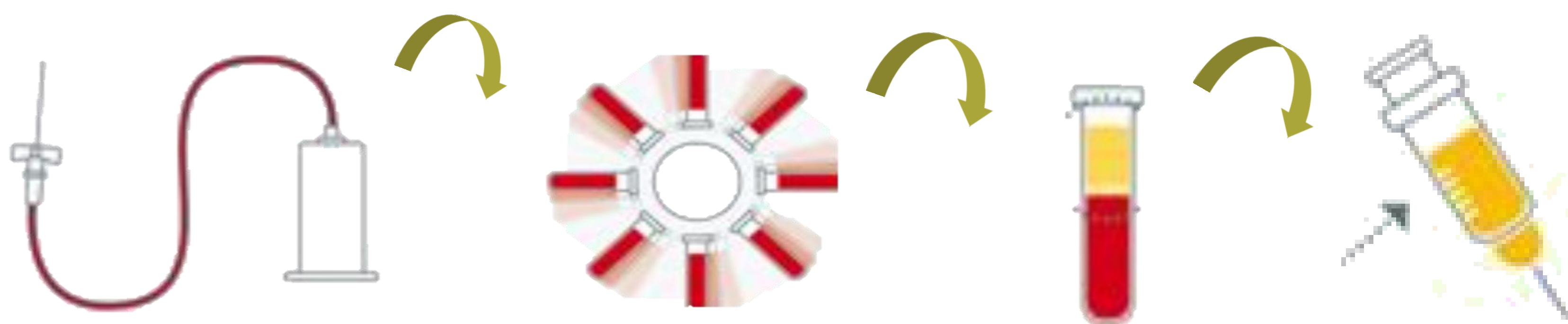
### WHAT IS PLATELET RICH PLASMA?

- Platelet-rich plasma (PRP) is defined as a portion of the plasma fraction of autologous blood having a platelet concentration above baseline [1]. PRP contains several different growth factors and other cytokines that can stimulate healing of soft tissue and joints ..
- Main indications in dermatology for PRP are androgenic alopecia, wound healing, and skin rejuvenation. For preparation of PRP, various protocols are used, with an underlying principle of concentrating platelets to 3–5 times physiological levels, then injecting this concentrate in the tissue where healing is desired[2].



### HOW IS PLATELET RICH PLASMA CREATED?

- Creation of PRP is simple, painless, and conveniently done at an office visit. The entire process of drawing blood to solution preparation only takes approximately 25-30 minutes. A small amount of blood is drawn from the patient, just like a routine blood test. Once the blood is drawn it is then placed into a centrifuge. The centrifuge is a machine that spins the blood at high speeds in order to separate the blood into red blood cells and concentrated platelets. Once the blood is separated the red blood cells are discarded, and we are left with concentrated platelet rich plasma (PRP) which is ready to be used in the treatment process. [3]



### WHY PLATELET RICH PLASMA THERAPY WORKS?

- Platelets contain storage organelles also called dense and “α” granules. These dense granules carry high energy molecules, calcium, serotonin, and other molecules that help in the transfer of energy between the cells. Together these compounds are responsible for the clotting of blood at an injury site. The “α” granules carry cytokines and growth factors. When introduced and activated at the treatment site, the granules kick start the healing process in three stages:
  - Inflammation
  - Quick creation of new cells needed to repair the injury
  - Recreating the damaged tissues[4]

### HOW PLATELET RICH PLASMA EFFECT IN SCAR ?

- Platelet-rich plasma therapy is an effective form of treatment for scars and acne marks. The growth factors found in the platelets regenerate tissues and create new blood vessels, improving the texture and vitality of the skin.
- PRP therapy stimulates keratinocytes and fibroblasts, which leads to new collagen creation in place of the scarred skin. PRP regenerates and rejuvenates skin tissue, utilizing your own cellular functions.
- Treatment for acne scarring typically utilizes 1-3 treatment sessions, most often spaced approximately one month apart. Expected outcomes include a more even skin texture, increased volume at the site of scarring and a more revitalized skin appearance. Over the course of the treatments, you can expect a gradually refreshed look. PRP Therapy can be successfully combined with laser therapy for even greater outcomes in scar remodeling.[5]



### CONCLUSION :

- ✓ The benefit to PRP therapy is that unlike other treatments it has a sustained outcome and is categorized as a permanent fix.
- ✓ PRP therapy uses a natural serum , is minimally invasive and help speed the healing .

### REFERENCES:

1. Marx RE. Platelet-rich plasma (PRP): what is PRP and what is not PRP? Implant dent. 2001;10:225–228. Doi: 10.1097/00008505-200110000-00002.
2. . Oc hair restoration. Orange county, california. Retrieved 5 july 2016"PRP therapy | hair loss treatment"
3. Platelet rich plasma (PRP) injection therapy & treatments, spinemd.Com, 2018 virginia spine institute.<https://www.Spinemd.Com/treatments/platelet-rich-plasma>
4. PRP therapy , platelet rich plasma treatment ,PRP injection MD, <https://www.Prpinjectionmd.Com/services/prp-therapy/>
5. PRP therapy for skin, scars & wellness , MIAMI institute, miami institute for age management & intervention <https://www.Miami-institute.Com/skin/prp-therapy/>