

**Short Communication**
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## Hybrid Laser in the Vitiligo Treatment

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Vitiligo is a chronic (long-lasting) disorder that causes some areas of the skin to lose their natural color. No one knows exactly what causes vitiligo, but it may be an autoimmune disease in which the immune system attacks and destroys the cells that produce the pigmentation.

Vitiligo occurs when the cells that produce pigment (melanocytes) die or stop producing melanin, the pigment that gives skin, hair, and eyes color. Patches of affected skin become lighter or whiter.

Although there is no cure for vitiligo, many patients manage to repigment the white spots caused by the disease with the right treatment. Especially in areas as visible as the face. There is no known cure for vitiligo.

There are various treatments that control the disease but nevertheless the result and the constancy that is required to see the improvement makes patients desist from them.

Radiotherapy and Ultraviolet Rays deal with the treatment of chronic dermatoses. A dermatosis is any skin abnormality or appearance of skin lesions.

Phototherapy has a 50-year history of safe use. In all this time there has been no increased risk or worsening of symptoms. Is safely prescribed for adults, children, people who are immunosuppressed, and pregnant or lactating women. It is safe and effective.

UV phototherapy units can provide UVA, UVB, or narrow-band UVB lights. This phototherapy treatment called PUVA therapy or Photo therapy provide great success.

One of the advantages of phototherapy booths is that they allow the treatment to be uniform both on the body and on the face, having privacy, with no untreated cold areas. On the other hand, it can be performed once a week without pain and without risk to the patient.

In the case of biological treatments with Raptivall, Enbrell or Amevivell, only 21% of patients reach the PASI score of 75%. On average, only 29% of treated patients achieve a PASI score of 75% within 12 weeks of treatment. Compared to PUVA therapy, usually 20 to 25 treatments are needed to achieve 90-95% improvement in patients.

We must remember that with immunosuppressive treatments there are side effects that are sometimes not easy to overcome, IM or IV injections are required for each cycle of treatment and to date their long-term safety has not been proven. On the other hand, with phototherapy, the side effects are minimal, the treatment is performed standing in front of a light for 5 to 10 minutes and it has been in use for decades, so the safety of the procedure is more than proven.

Currently we are using the Hybrid laser from the Alma laser company for the stimulation of melanocytes in the production of melanin. The heat that produces the CO2 laser in skin tones 3 to 5 increase the pigmentation risk which is the result that we are looking for to produce a recovery from the natural skin tone. The sessions are carried out every 3 weeks for the melanin to be produced by the melanocytes. In just 2 sessions the changes obtained are very good, we are working many other cases with more sessions and different medication.

**The Parameters Used For The Treatment Are The Following** Hybrid lift CO2 and Erbium 1570 with CO2 25 watts, Active time 1.0 ms Energy 25 – HyGrid Ratio 1:1 Pixels 9x9 Cooling on – Singular mode Erbium 8.0 watts, active time 3.0, Energy 24. IMPACT at the end of the treatment was performed with melanin solution.



**Before and After 2 Sessions Treatment**



**Before and After 2 Sessions Treatment**



**This is a Vitiligo case that we have, we perform two sessions with the Hybrid laser and the impact device was used as we describe**

### **Conclusion**

It is important to clarify that PUVA therapy cabins are not the same as tanning cabins, the difference consists in the intensity of the light and the type of ray they emit, so the patient must be sure that it is medical equipment and not cosmetic.

So far, the Laser treatment results have been very good in a short period of time, but the study of more patients will give us the result of the benefits produced by the Hybrid treatment. In the same way we must demonstrate if the results in body hypochromia give the same results as in the fase [1-6].

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