## A descriptive study of Microfractional RF treatment for reduction of acne scars: A Filipino experience

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- Introduction Microfractional RF treatment helps stimulate collagen regeneration of the tissues. It is fractionated, thus damage to the skin is minimized, treatment is safer and downtime is less. Microfractional RF treatment can help in reducing wrinkles and fine lines, it tightens the skin, and lightens acne scars. This treatment promised a close to zero chance of developing hypo or hyper pigmentation. This white paper describes the Microfractional RF treatment in the Philippine setting.
- MethodOne (1) participant with acne scars was enrolled in the study. See "before" photo of the<br/>subject immediately below:



The subject underwent a single session of iFrax Microfractional RF treatment last December 19, 2012. The treatment area (face) was gently cleansed using soap and water. Topical anesthesia (9.6% Lidocaine) was applied 30 minutes prior to the treatment (Figure 1, 2, 3). A single jar contains 800g of 9.6% Lidocaine.



Figure 1. Application of Topical Anesthesia (9.6% Lidocaine)



Figure 2. Topical Anesthesia is being wiped off by the operator



Figure 3. Topical Anesthesia was removed and patient is ready for the iFrax treatment

A sterile D-PIN needle was used. The treatment settings for the white zone were as follows (Figure 4): Interval = 5%, Energy = 20%, and Needle Depth = 1.5. The operator maintained a 10% overlap and a single pass treatment on the entire face. Double pass was used on the problem areas such as acne scars on the cheeks.



Figure 4. Treatment Parameters (White Zone)



Figure 5.1 During Treatment (White Zone)



Figure 5.2 During Treatment (White Zone)



Figure 6. After Treatment (White Zone)

After the forehead (white zone), the cheek area (pink zone) was treated next. The treatment settings were as follows (Figure 7): Interval = 5%, Energy = 25%, and Needle Depth = 3.



Figure 7. Treatment Parameters (Pink Zone)

(No photo available – During the Treatment: Pink Zone)

**Results** The participant was photographed using a camera phone (Iphone 4).

After the iFrax session, the treatment area was carefully assessed by three (3) Registered Nurses. Immediately after the treatment, the area developed strong erythema, edema and slight bleeding (Figure 8, 9, 10). The client reported mild pain during and after the procedure.

Cold application was done at once using a cold hammer (Figure 11). Twenty minutes after the cold application, client reported less pain and discomfort. Edema on the face subsides minimally (Figure 12).

**24 Hours After Treatment.** Upon physical examination, erythema subsides further but the skin is still edematous (Figure 13, 14, 15). The client reported an itchy feeling and was advised not to touch or scratch the area. The participant was able to return back to his normal activities after the treatment.

**One Week After.** Further evaluation was done to assess healing of the area. Edema subsided after 2 - 3 days (Figure 16, 17, 18). Itchiness was reported until the 5<sup>th</sup> day. Scabbing was observed.

*Two Weeks After.* The treated area was fully healed. Crusted dots are totally gone. The treated area lightens and deep scars were reduced (skin was compared thru digital photos). Client reports skin tightening (Figure 19, 20, 21).



Figure 8. Immediately After Treatment



Figure 9. Immediately After Treatment (Right Cheek)



Figure 10. Immediately After Treatment (Face)



Figure 11. Cold Application



Figure 12. After Cold Application



Figure13. 24 Hours After Treatment(Face)



Figure 14. 24 Hours After Treatment (Right Side)



Figure 15. 24 Hours After Treatment (Left Side)



Figure 16. 1<sup>st</sup> week After Treatment (Face)



Figure 17. 1<sup>st</sup> week After Treatment (Right Side)



Figure 18. 1<sup>st</sup> week After Treatment (Left Side)



Figure 19. 2<sup>nd</sup> week After Treatment (Face)



Figure 20. 2<sup>nd</sup> week After Treatment (Right)



Figure 21. 2<sup>nd</sup> week After Treatment (Left)

ConclusionsAlthough Micro needling with RF is a relatively new technology, it is found<br/>effective in reducing acne scars on Filipino skin. Side effects were limited and<br/>transient.