

Evaluation And Application of Energy-Dependent Devices in Facial Antiaging in Chinese Population

BACKGROUND

In addition to skin laxity, Chinese population also have other manifestations such as pigmentation, vascular lesions, inflammation, fat accumulation in skin aging.

OBJECTIVE

According to the clinical manifestations of skin aging, we should select the most suitable device to achieve the maximum efficacy.

MATERIALS AND METHODS

Through a large number of clinical patient efficacy evaluation, combined with a number of pubmed related literatures, we summarized the adaptive population and advantages of the four anti-aging devices.

RESULTS

1. **The monopolar Radiofrequency (mRF)** heats fibrous septa in subcutaneous fat tissue, deeper penetration(about 4.3mm), the most suitable patients is mild to moderate periorbital and facial skin laxity with fat accumulation. Advantages: ①Epidermal

protection;②Significant effect of single treatment; ③Long maintenance time.

2. **Invasive Fractional Microneedle Radiofrequency (FMR)** can effectively inhibit inflammatory signaling pathways and down-regulate inflammatory factors, more suitable for patients with facial laxity and insufficient volume, combined with inflammatory disease (Acne, Rosacea, etc.) and enlarged pores. Advantages: ①Wide scope of application; ②Safer with dark skin.③Especially suitable for patients with thin faces.

3. **Microfocused Ultrasound (MFU)** focus on the depth of 2.0mm, 3.0mm, 4.5mm respectively, which is equivalent to the treatment of dermis and SMAS layer . It is more effective for clinical improvement in the lower face. Advantages: ①Safe nonsurgical

alternative; ② Accurate, adjustable and sufficient target depth.

4. **Long-Pulsed 1064 nm Nd:YAG and 755 nm Alexandrite Lasers(LP064nm+755nm)** due to 755 wavelength to pigments and 1064nm to deeper blood vessels, more suitable for patients with skin laxity accompanied by pigmentation and telangiectasia. Advantages:

①High comfort ②Short downtime③Comprehensive solution to the complex problem of photoaging.

CONCLUSION

Due to its unique advantages, devices of different principles can improve various problems of facial aging of Chinese population. Based on the patient's assessment and concern to select therapeutic equipment to maximize the efficacy.

KEYWORDS

Energy-based devices ; Facial aging; Chinese population