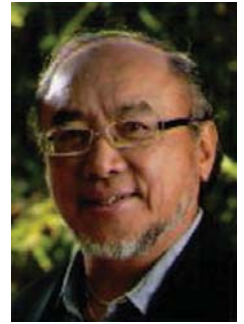




SCULPTRA / Poly-L-Lactic Acid (PLLA) (A Collagen Stimulator to build up the Cranial-Facial Platform)

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We, as plastic surgeons, know how the body and the face age. In the face, the essential feature is the loss of volume, mainly in subcutaneous fat and collagen. In severe cases, the muscle and bony elements are also involved.

So the new approach to restore Youth is a volume replacement treatment in various forms.

We have started off with collagen injection followed by the use of hyaluronic acid. With these two absorbable materials, we were able to build up volume loss and thus created a more youthful look. But we have the problem of re-absorption with ultimate volume loss again.

Because of that, the good results we have usually last for around nine to twelve months.

Can we stimulate the body to produce collagen? The answer is yes. We have done it by radio-frequency treatments - like Thermage. The partial cellular injury resulted in a sub-dermal collagen formation and therefore skin tightening. However the collagen is at a superficial level.

Then Poly-L-Lactic-Acid (PLLA), which has been shown to stimulate collagen formation after injection, came into the market. It was used originally in patients with lipodystrophy secondary to HIV infection. The results were so promising that in 2009, it was approved by FDA for cosmetic improvement of facial features secondary to fat and collagen loss.

PLLA can be injected as a day case with application of skin anaesthetic cream and most of the time, there will be minimal down-time. Occasional bruising may occur but with a proper post-injection skin care regime, complications are rare provided straight rules are followed. A proper injection training course and supervision is required.

The PLLA is injected into the subcutaneous and pre-osteal areas where build up of collagen will enhance facial features that will lead to a youthful appearance.

It is best for the temporal area depressions, the tear trough fat loss, the loss of the malar mount, the nasolabial groove build up, the correction of the Marionette line and the defining of a better jaw-line (thus smoothing of the jaw). With deep mentalis muscle injections, it can also produce a chin prominence. In Caucasians, building up of cheek-hollowing, which is the main area of lipodystrophy in the HIV group of patients, is also possible. It is NOT for the creation of a nasal bridge or tip nor is it for correction of forehead supra-brow depressions. These areas are too superficial and complications will occur.

Before the sessions of injections --- and there are usually

between 2 to 3 sessions—the operator should agree with the patients the areas that they would like to build up in volume.

There are minor differences between Caucasians and Orientals as to what they prefer and these should be addressed beforehand. We usually use 2 vials of solution (each 7 ml) for the first session and probably 1 to 2 vials for the second. The third session, which may or may not be needed, usually means another vial. The reaction and the regeneration power of the patient need to be allowed for. The older their age group, the less reactive they are. For those individuals, a much longer period should be allowed for the full effects to occur. Patients should be forewarned to prevent disappointments.

The intended areas to be corrected should be marked out. Local skin anaesthetic cream is applied to the sites where you intend to have the needle insertions. After the injections, the patient should be able to see the immediate effect of the volume replacement achieving the desired youthful features. This effect will GRADUALLY materialise in 3 to 4 months.

One must emphasise that the immediate “good-looking” effect will disappear in a day or two when the fluid is re-absorbed, but they should expect their youthfulness to return over the next few months. As the improvement is so gradual, patients will seldom notice it themselves. Photographic record MUST be taken to show the improvements which gradually happen. This gradual improvement can last up to and beyond six months. A friend’s compliment is usually their first sign of rejuvenation.

We usually space the sessions of injection four to six weeks apart.

As we are asking the patients to produce their own collagen (experimentally proven by serial biopsies), those new collagen will last longer. Conservatively speaking, it may take over two years before they start to disappear.

So we are looking at a product that uses the patients’ own body mechanism to produce their own collagen. It is intended to be a gradual process. Patients wanting immediate results will be disappointed but for the group of forties to fifties who like to look younger but not wanting friends to notice “things being done” to them, this is the ideal treatment.

With a renewed Cranial-Facial Platform of adequate volume enhancement, we will be able to add-on other modalities of facial rejuvenation like laser for pigmentations, Botox for superficial expression line, Thermage for skin tightening etc.