Biostimulation with Polydioxanon Threads

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Abstract
Thread lifting is an innovative method of face and body tissue reinforcement, revitalization and lifting using sterile absorbable PDO(Polydioxanone) mesothreads.

After 2000s, minimal invasive technique became popular. As the methods, laser and RF machines were developed rapidly. But the effect wasn’t as clear as previous surgical methods. Thread Lifting is the alternative which is less invasive but highly effective. The first industrialized Lifting Thread is well known as Aptos. However many kinds of complications of Aptos were reported and due to non-absorbable character of polypropylene, the problems were difficult to solve.

As the answer, PDO(Polydioxanone) absorbable thread appeared. The material, PDO is a suture commercialized since early 1980s. It is a monofilament known to cause the least tissue reaction among sutures. For the reason of its stability, it is widely used.

The product comes in the form of folding the thread into a V shape and fixing one end to a needle. It first became employed in medicine after was KFDA approved in Korea in 2011. PDO itself hydrates and melts in the skin after six to eight months but the induced collagen lasts about one year more. The procedure is highly effective in skin rejuvenation by inducing collagen synthesis from stimulating fibroblast. Its merits in procedure are Minimal invasive treatment, No downtime and immediate effect. Due to those advantages, this product has been popular in Asia and CIS countries in short time and spreading into other continents rapidly.

Polydioxanone threads differ from the other biostimulators because they gradually induce a minimal foreign body reaction, in the place where they are injected and located. This granulation tissue forms a scaffold which supports the sagging tissue and tightens the skin. It acts as a medical face lift by improving fine lines wrinkles and nasolabial folds. It also improves skins vitality and elasticity. The treatment consists of embedding therapy needle with absorbable polydioxaneno suture. It determines very little pain swelling and injection mark. Patients can put on make-up just after the treatment. Suture dissolves naturally and harmlessly in the skin. The revitalization programs have rare contraindications and are useful for all types of skin and age groups. In facts, this is both a preventative and curative method and is therefore useful in both young people, as prevention against the first signs of aging and for mature patients (excellent after menopause) in reducing and contrasting already aged skin. The treatment is composed of a series of micro injections, thanks to how polydioxanone threads are inserted into the skin of the area to be treated. In general at least three sessions are needed depending on a protocol that varies according to the characteristics of the skin (phototype, age, lifestyle, oxidative, stress, etc.) Only in the case of skin pathologies it is best not to carry out the treatment. The procedure causes slight discomfort, which is normally well tolerated, and bruises are rare due to the injection technique.

The biostimulation with polydioxanone threads is suitable for man and women. It does not require any type of preparation.