

The Gold Thread, Principles of the Method **Retrospective study of 3,000 cases**

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INTRODUCTION

The idea of the thread under the skin goes back more than half a century. For a face that was getting tired and relaxed, even in young patients, the only solution was the facelift, heavy and disproportionate act for early lesions.

Several materials were tested: catgut, copper, synthetic fibers, silver, Gortex (ref: 1, 3, 7, 8). These materials gave no results and sometimes caused serious complications. The golden thread implantation technique was developed by Dr. JP Caux, almost 40 years ago (ref: 1, 3, 7, 8).

At first, the results were disappointing with many failures, and few doctors dare to practice it. It lost its attraction because of the lack of training and poor indications. The technique has been refined over time to being fully developed today and by a trained and experienced physician.

The technique of gold thread has regained its former glory and is practiced by doctors and surgeons around the world: Americas, Europe, Russia, Asia (ref: 1, 4, 5, 7, 8).

RETROSPECTIVE STUDY

This study examined 3,000 cases treated over a 25 year period and consisted of 85% female and 15% male, ranging in age from 43 to 79 years. The purpose of this study is to evaluate the efficacy, safety and stability of the results of gold thread implantation.

EQUIPMENT

The deliberate choice of gold wire was made on the latter properties. It is 24K gold compound to 99.99% pure, in line with European standard **MedDev**¹ and is in accordance with the standards established by the FDA. Gold is inert, harmless to the body, and well tolerated (no allergy, no rejection) with an antibacterial role (ref 2). Flexible and malleable, it causes no stiffness of the skin.

¹ CE 318 in Identification Number of Cimel, A CE Marking Notified Body located in France.

HISTOLOGY

Implantation of gold thread subcutaneously causes a granulomatous reaction surrounding the thread of crosslinked fibers.

No polynuclear giant cells were observed, demonstrating the absence of rejection. The observed fabric is formed of collagen, elastic fibers and connective tissue (Ref: 3, 9).

This reaction creates a true internal adhesive solid support with stimulation of collagen production, thanks to the ionizing effect of gold. The fibrous reaction occurs between 2 and 6 weeks.

Several studies in the laboratory or on patients proved the role of gold thread in fibrosis. Dr. Pedro Orenes performed a histological study on mice and showed a fibrous reaction around the golden thread (Ref 4).

The team of Dr. W. Rondo, Jr practiced biopsies of the anterior part of the arms in patients 34 to 53 years, who received an implant of gold thread. Histological sections revealed a granulomatous reaction surrounding the gold wire of crosslinked fibers (Ref: 3).

THE TECHNIQUE

Implanting the golden thread should be in a medical and aseptically environment with sterile equipment. The skin is disinfected like surgery. Skin plots are made sitting or standing to better visualize the lesions. These plots allow for the correct determination the areas to be treated, inclination and the number of threads to be implanted. For better results, the thread should be placed in a path back and forth, from bottom to top, with an inclination angle of 30° to 45°, depending on the size of the relaxation.

Anesthesia is local Xylocaine with adrenaline, except against-indications identified during the consultation. It is done only at points of entry and exit thread. The threads were placed in the deep dermis, according to predefined paths. The gold threads are associated with absorbable thread 2.0 or 3.0 depending on the thickness of the skin.

The procedure takes between 30 to 90 minutes, depending on the size of the treatment area.

RESULTS

The results were assessed on two points of view:

- Patient Satisfaction: 75% very satisfied, 20% moderately satisfied, and 5% dissatisfied.
- Clinical examination: the results are visual from the 15th day and up to 3 months, up to their effectiveness. On the face, there is a marked improvement of the oval and the angle submental subcutaneous mentalis, nasolabial folds and bitterness wrinkles, and the skin is toned. In the body, the effects can necessitate a longer time. No stiffness of the skin has been detected, and threads are not noticeable at palpation. They can be put in as highlighting during a facelift (ref: 9).

The gold threads are visible on radiographs but their presence does not prevent the reading of X-ray or scans.

SIDE EFFECTS

Immediate: They are simple: light swelling and sometimes a few bruises. There is no post-operative pain, but the discomfort can be felt within 24 hours of the implantation.

No medical treatment is prescribed and restraint is not necessary. The resumption of socio-professional activities is immediately.

No releases were found; at times a thread may exceed the skin by mechanical effect.

Remote: With more than 30 years experience and thousands of cases relating gold thread implantation no incident has been detected, both locally and general.

INDICATIONS

The indications for the gold thread implantation have expanded and are aimed at both the face that body (neck, arms, hands, abdomen, and thighs). The implantation of the golden threads indicated for thin skins with moderate sagging. They are a curative and preventive treatment. They can delay the indications of a facelift, to sustain the results, but never replace it when it is needed.

CONTRAINDICATIONS

- Local: cutaneous skin problems

- General provisions: presence of system diseases and autoimmune diseases, and the general principle of awareness, pregnant and lactating women.

RELATED ACTS

The association of gold thread and other medical methods to optimize the results.

- Lipolissage: if excessive fat is present (jowls, double chin, belly). Great use of the Sculpt Face, the innovative patented instrument; fat is made integral disposal.
- Smoothing: if smoothing is most importantly, the Face Sculpt allows it to be done a traumatic, though penetration of a wide cling wave for better traction coetaneous effect.
- Thermo-frequency: Targeting the deep dermis, it causes a reaction of connective fibers, maximizing the effects of the gold thread, especially since the latter is thermal conductor.
- The fillers with fillers increases volumes and attenuate wrinkles significantly.
- The lasers act on the cutaneous surface imperfections such as hyperpigmentation, scars and wrinkles.

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