

## Contour Threads Case Report Series

### **BIPLANAR NEEDLE POSITIONING AND TOPOGRAPHICAL MARKING SYSTEM FOR USE IN CONTOUR THREADS AND MID-FACE REJUVINATION**

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#### Introduction:

As with any procedure in cosmetic surgery, patient selection is the key initial decision in order to obtain optimal results. The contour thread procedure fulfills the recent demands of cosmetic patients. It is minimally invasive yet effective procedure. It is the latest technique to offer for a significant improvement in facial rejuvenation with minimal down time and potential complications. Its results far surpass any of the non-ablated lasers presently available for skin tightening and facial rejuvenation.

The goals of mid-face rejuvenation center around restoring the "triangle of youth" which consist of the malar eminence, nasolabial fold, corner of the mouth and labiomandibular areas (see figure 1, triangle of youth). With the appropriate placement of contour, specific areas of the mid-face can be individually targeted for improvement.

#### Technique:

After initially marking the patient as described in figure 1 and with the infiltration of local anesthesia along the incision site and proposed needle pathways, the contour threads are placed through a 2.0 cm temporal incision.

The present technique focuses on improving 4 key anatomical areas in order to maximally restore the triangle of youth and result in a more youthful appearance in general. Each anatomical area is corrected with the use of a specific thread for a specific purpose. (See figure 1)

#### Suture Placement and Function:

The placement of the first contour thread focuses on improving lateral orbital rim and infraorbital rim hollowness which is a key sign of facial aging in the triangle of youth area. Thread #2 restores the descent of the malar pad and improves the superior portion of the nasolabial fold. Thread #3 corrects the descent of the corner of the mouth, improves the lower half of the nasolabial fold and also the definition in inframalar area. Thread #4 focuses on the descent of the labiomandibular area and the labiomandibular fold proper. Keeping the corrective function of each of these threads in mind, a significant improvement can be made in the immediate appearance of the patient. With this technique, focus can therefore be made on the specific anatomical areas that vary in severity

with each patient and we can selectively enhance a desired area.

Key points to keep in mind have to deal with the placement of the contour threads above and below the zygomatic arch. All threads are placed in the deep subcutaneous plane above the zygomatic arch and then pass into the superficial SMAS plane below the zygomatic arch. It is here that the bar portion of the suture interacts with the SMAS (muscular aponeurotic system and muscles), in order to be anchored firmly and to support the underlying tissues in a deeper context or fashion similar to a standard facelift technique. It is this support of the underlying facial musculature and SMAS level that creates the initial improvement as well as long lasting results that have been seen over the past year.

Using a superficial marking system on the patient who locates the zygomatic arch, the thread placement has been a great aid in creating reproducible and reliable results. (See figure 2) Solid lines represent placement of contour threads in the subcutaneous planes and dotted lines below the zygomatic arch represent placement of the threads in the deeper SMAS muscular plane. With these markings in place, prior to placement of the sutures, the operator can be completely focused in obtaining the appropriate depth of contour thread placement and also knows when to transition into the deeper muscular SMAS zone during the needle insertion. This allows for a correct placement of sutures and limits the need for suture removal and repositioning. (Patient #1 and Patient #2)

Over the past six months, utilizing this technique, we have noted an initial marked improvement in the triangle of youth and an extremely high level of patient satisfaction for this office based procedure. We have noted an initial contracture of the skin in a approximately a week to ten days with an overall marked long term improvement in the patient's overall facial countenance. Due to the fact that the contour threads have been placed through the SMAS and muscular plane as a source of final anchoring, it is anticipated that long term results will be significant based upon the fact that the basic fundamental principles are the same for open face-lifting in general.

In summary, the use of contour threads as an office based procedure is a technique that initially results in excellent immediate results and a natural look within 7-10 days. Utilizing the topographical mapping system and biplanar positioning of the threads similar to the concept utilized in open facelift procedures, most likely will result in a significant long term effect lasting a number of years and without a question can surpass the standard results achieved by the presently available non-ablative laser techniques. It is obvious that the use of minimally invasive cosmetic procedures will become the trend in the future. The utilization of contour threads without a question will become the standard arsenal in the cosmetic surgeon's office based procedures.

**Patient # 1**



**Patient # 2**



**(Figure 1)**

