
Body Sculpting with Silicone Implants

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Preface

The Road Less Traveled

Body sculpting with implants is something that surgeons have been doing for over 50 years, since the advent of breast augmentation implant procedures in the early 1960s. I personally have been performing body implant surgery, outside of breast augmentation, for over 20 years and have seen all manner of patients and conditions requiring or wanting muscle sculpting. The first body implant procedure that I became familiar with was, of course, breast augmentation surgery. I think most of us that do body implants begin with breast enlargement procedures and grow into doing other muscle augmentation procedures. Breast augmentation is a relatively facile procedure with immediate results for both patient and surgeon. It is for that reason that muscle augmentation procedures are equally gratifying—immediate gratification.

My experience with body implants began just over 20 years ago when there was a patient that wanted to have a calf enlargement procedure. It was a procedure that I had not performed to that point but was willing to learn. I went to Dr. Bircoll in Beverly Hills and watched him perform several calf enlargement procedures. The procedure appeared to be technically easy to perform with results that were good. Since beginning calf augmentation in the early 1990s, I have performed calf augmentation procedures on body builders, on patients that had difficulties with clubfoot deformity and congenital defects of the legs, and on patients with acquired asymmetries from trauma. Calf implants have really served well in helping these patients to achieve symmetry and improved self-esteem.

The early work with calf implants made me wonder about augmenting other muscle groups. It was around that same time period that another patient approached me about doing buttock augmentation. I was aware of the work done by Gonzalez Ulloa in Mexico City. He had used silicone gel prostheses placed on top of the gluteus muscle to augment the buttock region. Some of his early works were done with patients that had suffered deformities in the gluteal region as a result of trauma or injections of various filler materials with subsequent infection and necessity to reconstruct the gluteal area. After reading about some of his early cases, I was intrigued and began studying the anatomy of the region and considered the possibility of placing the gluteal implant under the gluteus maximus muscle and on top of the gluteus medius muscle. Robles had published about a procedure where he had placed the silicone prosthesis under both the maximus and medius muscles but saw that

siatic irritation was produced because of the proximity of the implant to the sciatic nerve due to deep implant placement. After reading about his work, I spoke with my professor and mentor, Ivo Pitanguy, about the possibility of placing the implant above the medius muscle. He encouraged me to proceed with the idea. Similarly, my discussions with Richard Webster resulted in words of encouragement for placement of the implants below the gluteus maximus but above the medius muscle. I then proceeded to design an anatomic solid silicone implant as the implants at that time were very hard and difficult to position under the gluteus muscle. Our initial results on 20 patients was published in the *American Journal of Cosmetic Surgery* in 1997. All of the patients in the series had a good cosmetic improvement without evidence of sagging as the prosthesis was well supported by the overlying gluteus maximus, which acted as a hammock for the prosthesis. In the original buttock augmentation procedures, it was my custom to place the incision in the superior portion of the buttock; however, this left noticeable scars. I then adapted the technique of Gonzalez Ulloa and placed the implants through an intergluteal incision. The original implant that I had designed was manufactured for me by ABT Corp. and measured 4.1 cm in length by 12.5 cm in width by 2.8 cm in height.

After my work in buttock augmentation, I began to explore pectoral augmentation. In evaluating the work of existing surgeons, I noted that the implants were not well supported in the lateral aspect. In order to correct this matter, the pectoral augmentation procedure was modified through the axillary approach to include reinforcement in the lateral aspect. The pectoralis was well visualized during the operative procedure and was then reapproximated to the lateral chest wall/rib periosteum to prevent lateral migration of the implant and palpability of the lateral portion of the implant.

As the popularity of the pectoral augmentation procedure grew, there were more and more patients asking for augmentation of their arms as well. It so happened that I was attending a course in New York City hosted by Sherrell Aston when a publicist asked if I was doing any other sculpting procedures with implants. My office manager at the time was with me in New York and said to the publicist that "Dr. Chugay is considering doing biceps augmentation in the near future." The publicist was all excited and then called me for more information. Hating to make my office manager out to be a liar, I had to come up with a biceps augmentation procedure. In my initial work, the implant was placed in the submuscular plane. This, however, caused significant postoperative pain and involved more risk in the process of dissection. Later, I began to place the implants in a subfascial plane that improved the safety of the procedure. The procedure was initially designed to help patients that had suffered trauma to the biceps muscle and had a depression or deformity in the area of the biceps. It was also quite useful in reconstruction of the arm when large tumors had been excised and created asymmetry between the two extremities. I found it equally useful in giving patients more volume in the area of the biceps when they were unable to achieve that added volume through exercise on their own. Later, as the procedure became more popular, I had body builders wanting the procedure done as the incision was well hidden in the axilla and amplified their already large arms. Our work in biceps

augmentation has been published in the *American Journal of Cosmetic Surgery*, and it continues to be a popular surgery with excellent results in over 200 patients.

Triceps augmentation came as a natural add-on to the existing list of muscle augmentation procedures. Quite a number of patients wanted to have their triceps enlarged, and I developed an implant to position in the triceps region along the long head of the triceps muscle, beneath the fascia.

Next, in the list of muscle augmentation procedures came the development of the deltoid augmentation procedure. At the time that I had developed the triceps implant, I had a patient that presented with marked hypoplasia of the right deltoid. He was a principal of a high school and had been bothered for some time by his students about the asymmetry of his arms. He had undergone multiple procedures to improve the deformity but without significant results. So, he asked me whether I could design an implant that can be placed in the area of his rudimentary deltoid muscle, perhaps submuscularly, that would give him the bulk and the volume that he wanted. So, I had an implant developed for me by Aesthetic and Reconstructive Technologies, Inc. (AART, Reno, Nevada). Since they had helped me in enhancing my gluteal implant and biceps implants and developed my triceps implant, I knew that I could trust them with this new adventure. Within a few weeks, we had the deltoid implant ready. The surgery was then scheduled. Plans were made for an incision right over the deltoid muscle. Dissection would then be carried through the rudimentary deltoid muscle to a submuscular plane. Postoperatively, the patient was ecstatic with the result even though the improvement was not dramatic and he was not perfectly symmetric. To him, the change was huge and it gave him more self-confidence, thereby achieving our goal with the procedure.

So the saga continued. Next, in our list of muscle augmentation procedures came hip augmentation. I had a transgender patient that approached me about the possibility of building out her hips. The patient had a masculine and very narrow hip area which she wanted to have made into a more feminine hip. We designed an implant that was very similar to some of the smaller buttock implants, made of a soft silicone material. In this patient, we placed our custom-made implant on top of the fascia lata, in a very superficial position. The patient was ecstatic with the result; but, I was not entirely pleased as you could still see the well-delineated edges of the implant. The capsule that formed around the implant was also visible when the patient was examined months after the procedure. I proceeded to develop a procedure where the implant would be placed right along the lateral aspect of the femur. The implant was placed under the fascia lata, over the top of the femoral shaft. My early experience with this procedure was similarly published in the *American Journal of Cosmetic Surgery*. Since that time, I have had quite a few patients, particularly Asians with poor development of the hip area and transgender patients, benefit from the procedure. We have also seen females with developed hip regions, wanting more of a Kardashian or J Lo figure, benefit from the implant in the lateral hip/thigh region to create a more accentuated hourglass figure.

Now, after all these procedures, you will naturally ask what comes next. Well, we are looking at various options. There are some implants available

for six-pack abdominal augmentation. However, these implants can shift and produce very unnatural results if complications occur. Also, the implants do not move fluidly with the patient. We have looked at possibly developing six small prostheses that would be placed under the rectus abdominis fascia in the area bounded by the inscriptions of the rectus abdominis. This would then accentuate a patient's already defined abdominal musculature and create a more natural-appearing six-pack abs.

Over the years, I have had a great deal of fun developing and perfecting these procedures. They literally added an extra zest to my practice. I hope that you will enjoy reading about the various procedures that I have developed/improved upon.

The next generation of muscle augmentation procedures will rest with my son, Paul Chugay. He has recently joined me in practice and continues to be the coauthor on our works in the field of muscle augmentation. We are performing many of these procedures together, allowing me to pass on my knowledge and experience to him. It has been a great deal of fun teaching him how to perform these procedures, and together we are constantly improving upon what I have already been able to design/improve upon.

I hope this book will be of use to you and help you in taking care of your patients. Should you ever have any questions/concerns, I am at your service.

Nikolas V. Chugay, DO

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