

"Body Conturing" by Dr. Matta from Vie Magazine Spring 2010 Issue

As spring approaches, many of us rush to our closets to pull out a pair of shorts. Summer is just around the corner; and the dreaded bikini soon will be here.

The unfortunate reality is that the majority of us do not have the same firm body we had when we were twenty. Whether it's due to pregnancy in women or too many French fries in men, I get a lot of patients coming into the office asking for a way to shave off a couple of inches here and there.

Since the advent of penicillin, North America searches for a magic bullet: one pill that will fix everything. The same ideology applies to weight loss and body sculpting; patients hope there's one thing that will fix the effects of time and lifestyle. While there is no miracle, including surgery, that will restore a perfectly youthful form, technology and medicine have improved significantly in the last 5 years. It is important to understand that there are different things that people want addressed, but they often lump it all together. In this article, I will discuss the concept of body shaping which is most common for abdomen (mummy tummy) and thighs & hips.

Abdominal Fat

In the abdominal area there are two causes of a bulging belly: fat and skin laxity (loose skin from over-stretching due to obesity or pregnancy). The two problems need to be treated in different ways.

Abdominal fat is broken down into omental fat and subcutaneous fat. Omental fat is the fat around your intestines and is deep to the muscles of your abdomen. This kind of fat is most affected by diet and is the most serious kind of fat since it increases your risk of heart disease, diabetes etc.. You cannot get rid of this fat by any current technology, including surgery. The only way to reduce omental fat is diet and exercise. Specifically, one needs to have a low calorie, low glycemic index diet, low in refined carbohydrates (bread, pasta, processed foods) and high in fruits, land and sea vegetables, lean protein and mono unsaturated and poly unsaturated fats (especially omega 3 fats). A detailed review of a healthy diet is beyond the scope of this article but crucial to achieving success. We haven't figured out a way to use technology to overcome lifestyle.

Subcutaneous fat, on the other hand, is under the skin and above the muscles of the abdomen. This is the fat that is targeted with liposuction, mesotherapy and ultrasound and other modalities. While this fat does also decrease with diet and exercise, it's not

unusual that patients will still notice a small roll of fat that won't go away no matter how many crunches they do.

Lipsuction

One of the most common procedures for reducing subcutaneous fat is liposuction, in which a small canula is inserted into the fat and it is literally sucked out. While this has been and remains to be popular, many patients are looking for ways to reduce the fat without the risks of surgery (including anesthetic risks, blood clots, dimpling etc..) or the downtime with liposuction (a compressive garment needs to be worn for 2 or more weeks, although this has come down from 6 weeks due to newer liposuction techniques).

Mesotherapy

Mesotherapy is a technique of injecting small amounts of a lipolytic substance (a medicine that breaks down fat) into the specific pocket of fat that is of concern. It works well in small localized pockets, but is not useful for larger areas and can also lead to dimpling in areas that are injected. Multiple treatments are necessary and there is associated pain from the injection and the swelling/bruising post treatment. While it was popular a few years ago and still is in Europe, it seems that North America is leaning towards technology over chemotherapeutics to achieve the desired effect.

Ultrasound and Radiofrequency

Technologies used for fat reduction include radiofrequency and ultrasound. Radiofrequency (RF) was the first technology used and included the Velashape and Accent as well as others. While some patients noticed improvement in fat mass, others were equivocal in their results. It seems that RF is more effective for skin tightening than fat loss and ultrasound is winning the race on fat reduction. The two ultrasound machines that I am aware of are Ultrashape and Liposonix. Liposonix is the latest generation and appears to be effective from anecdotal reports. It involves a single one hour treatment session and results in an average of 2.8 cm reduction in abdominal circumference 8-12 weeks after the procedure. It is NOT a replacement for liposuction or a way to lose weight. It is recommended for people with a BMI (Body Mass Index) of less than 30, good skin tone and elasticity without skin folds and no scars in the area. It is specifically for fat loss, not tightening the skin.

Skin Tightening

As I said above, there are two issues in the abdomen: fat and skin laxity. While liposuction, mesotherapy and ultrasound are useful for fat loss, they do nothing for skin tightening. Often patients will notice loose skin hanging from their abdomen after childbirth and mistakenly think that this is fat. The two most common modalities for skin tightening are laser (including wavelengths from Infrared to 1550 nm) and radiofrequency. It is important to understand that the general principal to effect change is the delivery of heat into the tissues causing tightening of the underlying skin. So, theoretically, any modality that is able to deliver heat into the deep tissues in a safe manner will be effective. The most well known infrared technology is the Cutera Titan. The RF technologies include Thermage, Tripollar, Accent and Velashape. While certain people will be adamant that one technology is better than another, the most important thing is the delivery of the treatment. This means that any machine is only as good as the individual performing the treatment. I usually explain this concept to patients by saying that if you heard me playing a violin, you would be turned off the violin forever and think it's a horrible instrument. It is not the instrument, technology or machine that matters; it is the qualifications, skill and artistry of the individual using the instrument, technology or machine. A great injector can do fantastic work with an inferior product, while an inexperienced injector could do a horrible job with a great product. When it comes to cosmetic medicine, it is the experience of the provider that is most important. A qualified and experienced provider will upgrade their technologies based on the need, not just the latest fad or the "latest and greatest". Patients often ask me what's new in cosmetic medicine and I often respond that I'm not interested in what's new. I prefer what has been tried and tested and most importantly...safe. I like to know that the product or technology has been around long enough to know its pros and cons and all the negative side effects as well as all of its positive benefits. Time also provides us with improved protocols to give patients the best result, minimizing the "guinea-pig" stage. Radiofrequency does work fairly well for skin tightening but within limitations. It again is most useful for people with an ideal or close to ideal body weight, with loose skin. If the skin is "too loose" , the extent of improvement will be reduced, although there will still be some benefit.

Cellulite

When it comes to the lower extremity, hips and thighs, the concerns are usually either fat or cellulite. The fat concern is addressed as discussed above. Cellulite, on the other hand, is a real nuisance. Treatment for cellulite include endermologie, radiofrequency, ionophoresis, creams and diet changes. While up to 80% of women will experience some cellulite, it can range from mild to severe. Women with severe cellulite will not

wear shorts or a bathing suit in public. Endermologie is probably the oldest technology and has given some patients temporary benefit. I have seen benefit from radiofrequency treatment as well, but again, it is temporary. Ionophoresis is a process of using electrical current to push a medicine into the skin, specifically for cellulite we use caffeine. This treatment also shows some temporary benefit, unlike using caffeine creams on their own, which has no benefit. Some women will describe improvements in their cellulite by diet changes. Unfortunately these results aren't consistent or reproducible between patients, but if you want to try it, there is no harm. The most common foods that contribute to "congestion" would include gluten (wheat, barley, rye, oats), dairy, some fruits, eggs and processed foods with high salt content.

Where to go

The internet is both a wonderful and terrible place to get information. Doctors and manufacturers put a lot of useful information on their website; while at the same time there are many sites and blogs that provide inaccurate information. I suggest you first get an idea of what your concern is, check out some of the information provided on the manufacturers' websites and see their list of recommended physicians. When you consult the doctor, they will be able to assess your specific needs and tailor the best approach for you.

In a nutshell, we have yet to discover the perfect treatment for skin tightening or fat reduction, but we're getting closer. Before you make a decision to do anything, make sure you go to a qualified doctor, one who understands the physiology of skin and fat and understands the technology that they are using. This will result in the best outcome with the lowest risk.

Drawn Vie magazine
Written by Dr. Matta