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*For scheduling an appointment for an assessment regarding
body contouring procedures after massive weight loss please
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The subspecialty of body contouring after massive weight loss is relatively new to the field of plastic and reconstructive surgery and evolved as a result of patients losing large amounts of weight after bariatric surgery. These patients experience rapid weight loss and subsequently experience an improvement in their physical health but are left with large amounts of skin that has lost its elasticity causing it to sag. It is similar to wearing clothes that are three sizes too large. The skin no longer fits the smaller body. As part of post-weight-loss treatment, plastic surgeons that are experienced and have training in the treatment of body contouring procedures can help patients regain form, function, and a pleasing appearance of their body after massive weight loss through reshaping procedures.

A patient planning to embark on the “bariatric journey” usually has questions related to the amount of excess skin and body contouring deformities that may develop after a successful massive weight loss process. As a plastic surgeon, I will try to answer some of these questions to help prepare the bariatric candidate for the challenges that they may face in the post weight loss period. I also hope to help decrease the anxiety associated with the plastic surgery aspect of the weight loss program. The information delivered in this note serves as an introduction to the broad subject of body contouring after weight loss.

So is there any benefit from having plastic surgery after weight loss?

There is a long list of benefits after proceeding with the body contouring procedures. I will list just a few of them as they appear in the medical literature:

Postoperative Changes: Positive

Self-esteem and positive emotional increase

Body image belittling decreases

Marital satisfaction increases

Eating behavior improves dramatically

Depression and anxiety is reduced

Health related quality of life improves

Postoperative Changes: Negative

Identity crisis

New relationship demands: jealousy from spouse; obese friends

Struggle with body image

Ongoing assessment

Overall this seems to be a long and complex “journey” but once it is completed it gives great satisfaction to the patient and the plastic surgeon as well.

Before doing any surgery it is important that you as the patient feel confident with the decision to proceed with the body contouring procedures. As a plastic surgeon, I want to be sure that you have realistic expectations from the surgery.

How to prepare yourself for the meeting with the plastic surgeon?

Prepare in advance a list of questions for the meeting with your plastic surgeon. One way to prepare for the meeting with the plastic surgeon is to attend one of the seminars in which general information is given about the plastic surgery aspect of massive weight loss patients. Usually large programs have seminars given periodically. The American Society for Bariatric Surgery's web site at <http://www.asbs.org> offers information regarding seminars and reading lists. There is a significant amount of literature about body contouring after massive weight loss, including internet information; however, one has to be selective about the material he or she chooses to read. Discussing body contouring procedures with patients who have previously undergone contouring procedures can be very helpful, although it is important to remember that each patient has different characteristics and what may work for one patient may not be the best approach for another.

***These are some of the most frequently asked questions by a bariatric patient at their initial consult with a plastic surgeon:
Will there be any excess skin after I lose weight and will I achieve the desired weight?***



At the completion of the weight loss process, there may be a significant amount of extra skin due to the fact that skin has a limited capability to shrink. In obese patients, this capability is even more limited due to the fact that the skin has been over stretched. The extra skin can be located in a spreading pattern over all the body or concentrated in specific sites of the body such as under the arms or in the tummy area.

What can be done about the extra skin?

Part of the extra skin can be removed and other parts can be relocated (lifted) and reshaped, all this in order to achieve a pleasant aesthetic body contour. This can be achieved with surgical procedures. Skin is the largest organ in the body and some surgical procedures done on the skin can be major.

What areas of the body are most commonly affected by the accumulation of over-stretched sagging skin after radical weight loss and what is the treatment for these areas?

Upper arms

Massive weight loss patients can present with varying deformities in the upper arms that at times seem inconsistent with their overall body type. They may present with a significant amount of deflation of the arm, as well as large amounts of extra fat and skin. The amount of extra fat and skin and the quality of skin will dictate whether the desired procedure is skin removal only or skin removal combined with liposuction. The scar resulting from this procedure is located on the inner part of the arm and therefore it is

less visible. The length of the scar is dictated by the amount of skin that needs to be removed. In some cases the excess skin extends to the armpit and lateral chest wall.

Upper chest wall and breast The upper chest wall and breast may accumulate a significant amount of sagging skin, mainly on the side of the chest wall and in the breast area. The breast can be droopy and deflated with loss of volume and the location of the nipple can be low. In male patients, the treatment usually requires removal of the skin and relocation (lifting) of the nipple and dark-colored skin around the breast nipple. In female patients, the goal of the surgery includes restoration of volume and rejuvenation of the breast. This can be achieved by a variety of techniques such as skin resection and nipple relocation or the use of implants to restore volume to the breast. Newer surgical techniques allow utilization of the extra tissue to the side of the chest wall for providing volume to the breast. The goals of the surgery with respect to breast reshaping include:

- 1 Elimination of excess skin
- 2 Recreation of the fold under the breast and placement in its correct position
- 3 Adequate balance and arrangement of the nipple position
- 4 Good projection with superior fullness
- 5 Good side curvature of the breast

Central trunk and abdominal wall

In morbidly obese patients, contour deformities of the abdomen are common after bariatric surgery and radical weight loss. The treatment of the central part of the trunk depends on the amount of excess skin and the degree of skin elasticity and layers of tissue beneath the skin such as the fascia. The final contour of the body depends significantly on the shaping of the deep layer of the abdominal wall. The amount of skin removed varies between skin located only in the anterior part of the abdominal wall up to a cir

a dietician can be of great help. Additional factors that may affect the final result include the quality of skin, the body mass index (BMI is a standard way to define obesity/an individual with a BMI of 30 is considered to be obese), and the general medical condition of the patient. It is important to remember that in some cases, additional surgery may be required to achieve the desired result.

Planning Your Surgery and Recovery

The plan for action to achieve the desired result is tailored for each patient individually based on the patient's aesthetic goal and list of priorities, availability of time for recovery and his/her general medical condition. Meeting with your plastic surgeon more than one time before proceeding with the surgery is advisable and bringing a family member or a friend is recommended, since the amount of information is very comprehensive. For example in the initial meeting, I usually ask the patient "what are the areas that you feel will give you the most benefit from surgery?" In addition, I assess the amount of surgery required for each area and the general medical condition of the patient. In the second part of the meeting, I usually assess the "patient component" which includes the factors that are important for the patient. These factors include the patient's goals and expectation from the surgery, the amount of time a patient can take off work to allow for recovery, and the support a patient has at home and ultimately what kind of work will the patient return to after completion of the recovery. For example, when planning the surgery for a patient that has very young children, I prefer to proceed with smaller procedures, allowing for a faster recovery and an early return to child care duties. Once a general plan is made, I will meet with the patient again to discuss in detail the first procedure. A detailed discussion about the surgical procedures is done before each stage. In this meeting, we discuss technical details of the surgery, benefits of the procedures as well as potential complications. Additional meetings are scheduled until all the concerns of the patient are addressed.

Potential Risks of Body Lift Surgery

Every surgical procedure involves a certain amount of risk and it is important that you understand the risks and possible complications that are associated with each surgical procedure. It is also important to remember that every procedure has limitations. The decision to undergo a surgical procedure is based on comparison of the risks to potential benefits. Although most patients do not experience complications, every patient should discuss this subject with their plastic surgeon to make sure he or she completely understands all possible risks associated with body shaping procedures. The complications can be localized or affect the entire body. Examples of local complications are opening of the wound, delayed healing, localized infection and bleeding, and a number of additional potential complications about which you should discuss specifically with the plastic surgeon during your consult. Examples of complications affecting the entire body include: allergic reaction, or emboli from deep vein thrombosis as well as additional complications which should be discussed in detailed with the plastic surgery team. Examples of long term problems may include scarring, lack of balance or harmonious arrangement in appearance, and persistent swelling. This list of potential complications should be discussed in more detail before the surgery and the plastic surgeon should be asked specific questions about unexpected outcomes of the procedure.

Additional Advisories

Your personal metabolic blood chemistry and protein levels may be abnormal following bariatric surgery and massive weight loss. These types of abnormalities as well as smoking may increase the risk for serious complications of delayed wound healing and infection following surgery. To avoid these complications, it is advisable to correct the metabolic abnormalities and cease smoking before and after the surgery. A consult and regular follow up with

cumferential removal of skin (all around the trunk). Closure of the gap created by removal of the skin is achieved by pulling the skin together from the upper and lower parts of the body. The pull up of the lower skin creates a lower body lift improving the appearance in the lower part of the body. The laxity on the deeper layer of the abdominal wall is treated with internal folding (placation) therefore providing a more attractive contour to the deep layers of the abdominal wall under the skin and subsequently to the trunk area. During this procedure any abdominal weakness or hernia is repaired. In some cases, mesh (a layer of prosthetic material) is sutured to the abdominal wall to increase its strength and provide additional support. In addition to the above procedures, liposuction may be performed in some cases to help shape the body by removing unwanted fat from specific areas.

Buttocks

An area that we try to address with particular attention is the buttock area. A common problem which may result from pulling up the skin in the lower part of the body is loss of gluteal (the muscles that make up the buttocks) projection resulting in a flattened buttock contour, which is directly proportional to the extent of body lift achieved. This problem can be addressed by utilizing the patient's extra skin which is removed. Instead of being discarded this skin is folded on itself and utilized to provide the desired shape and projection of the buttock.

Abdominal Wall

Since there are varied procedures for shaping the abdominal wall, I prefer to evaluate each case individually and try to "customize" the desired procedures based on the individual's needs. Some of the names associated with these procedures are: panniculectomy, tummy tuck, belt lipectomy, circumferential abdominoplasty, and lower body lift. It will be beneficiary to you if these different types of procedures are discussed at length with the plastic surgeon during the consult.

Thighs and legs

The characteristics of the thighs can be different in each massive weight loss patient in that very heavy patients can have deflated thighs with minimal excess skin, while others present with massive amounts of residual fat. An individual examination determines the location and amount of skin that needs to be trimmed as well as the amount of lifting to the remaining skin. Based on these factors and the desire to place the operative scars in a discrete location, the plastic surgeon will decide where to locate the operative incisions. A point of concern with surgeries in the lower part of the body is the potential for downward movement by a few centimeters of the operative scars, causing them to become more visible. This should not be seen as a complication but in some cases a long term outcome of surgical procedures in the lower part of the body. If movement of the scar occurs, it can be addressed and repaired at a second stage. Removal of excess skin from the lower extremity allows patient's to become more mobile and participate in physical activities that were previously considered difficult.

Face

In many cases, the contour of the face in the massive weight loss patient does not differ from the contour of the non-massive weight loss patient; however, occasionally massive weight loss patients may age prematurely. This may happen due to enhanced volume loss in the middle of the face and accumulation of skin with increased laxity in the neck and lower part of the face. The changes occurring on the face are a result of weight loss and aging. In young patients, the component of aging is less prevalent. Patients seem to show a lower level of concern about the face compared to other anatomical sites, most probably due to the fact that the changes in the face are more limited.

When should I plan to have the body contouring procedures?

The plastic surgery procedures in a bariatric patient should begin once the desired weight is achieved or the patient has a stable weight for a few months. Usually this stage is reached at 18-24 months after the bariatric surgery. It is important not to proceed with the body contouring procedures before the desired weight is achieved and the weight is stable. A body contouring surgery procedure performed too early may give a temporary result that may require a repeat surgery after the patient loses more weight.

Should all the areas of the body be addressed in one procedure or should it be staged?

Staging procedures for body contouring in massive weight loss patients helps to ensure an optimal outcome and enhance patient safety. There are many factors affecting the decision to stage a procedure among them being the body mass index. In most cases, some type of procedure involving the abdomen is performed first. Most importantly, surgery should be planned with the patient's safety in mind. The amount of surgery in each stage and subsequently the number of stages is dictated by patient factor, surgeon factors and the patient's ability to tolerate long surgical procedures. An example of a patient factor can be found in the amount of help a patient has at home during the recovery period. If the amount of help is minimal, it will probably be advisable not to operate on the arms at the same time that a lower body lift is performed, since the patient will need to utilize the arms for support when ambulating. Another example is a patient living alone that may need to ambulate earlier. Such a patient will benefit from a wound that it closed with not much tension may be slightly decreasing the amount of skin removed.