

## **GENERAL INFORMATION**

A person's own fat may be used to improve the appearance of the body by moving it from an area where it is less needed (usually the thighs or abdomen) to an area that has lost tissue volume due to aging, trauma, surgery, birth defects, or other causes. Typically, the transferred fat results in an increase in the volume of the body site being treated. Before the procedure, the areas from which the fat is being removed may be injected with a fluid to minimize bruising and discomfort. The fat may be removed from the body by a narrow surgical instrument (cannula) through a small incision or may be excised (cut out) directly through a larger incision. The fat may be prepared using washing, filtering, and centrifugation (spinning) of the fat. The fat is then placed into the desired area using either a smaller cannula or needle. Since some of the fat that is transferred does not maintain its volume over time, your surgeon may inject more than is needed at the time to achieve the desired end result. Over a few weeks, the amount of transferred fat will decrease. In some cases, more fat may need to be transferred to maintain the desired results.

## **ALTERNATIVE TREATMENTS**

Alternative forms of nonsurgical and surgical management consist of injections of man-made substances to improve tissue volume (such as hyaluronic acid and polylactic acid), the use of man-made implants, or other surgical procedures that transfer fat from the body (flaps). Risks and potential complications are associated with these alternative forms of treatment.

## **SPECIFIC RISKS OF FAT TRANSFER PROCEDURES**

### **Change in Appearance:**

Typically, the transferred fat loses some of its volume over time and then becomes stable. It is possible that more treatments may be needed to maintain the desired volume of the transferred fat and resulting appearance. Less commonly, if you experience significant weight gain, the transferred fat may increase in volume and cause an undesirable appearance. It is important to understand that more than one treatment may be needed and to discuss with your surgeon the costs associated with repeat treatments.

### **Firmness and Lumpiness:**

While most transferred fat results in a natural feel, it is possible that some or all of the fat may become firm, hard, or lumpy. If some of the fat does not survive the transfer, it may result in fat necrosis (death of transferred fat tissue), causing firmness and discomfort or pain. Cysts may also form at the site of the transferred fat. Surgery may be required to improve such conditions.

### **Under- or Over-Correction:**

The transfer of fat may not achieve the desired outcome. The amount of correction may be inadequate or excessive. It may not be possible to control the process of fat transfer due to factors attributable to each patient's situation. If under-correction occurs, you may be advised to consider an additional fat transfer procedure. If over-correction occurs, other surgical procedures such as liposuction or excision of the fat may be required.

### **Asymmetry:**

Symmetrical body appearance may not result from a fat transfer procedure. Factors such as skin tone, fatty deposits, bony prominence, and muscle tone may contribute to normal asymmetry in body features. It may not be possible to achieve or maintain exact symmetry following fat transfer.

### **Long-Term Effects:**

Subsequent changes in the shape or appearance of the area where the fat was removed or placed may occur as the result of aging, weight loss or gain, or other circumstances not related to the fat transfer procedure.

### **Tissue Loss:**

In rare cases, the transferred fat may cause the skin over the treated area to be injured resulting in the loss of skin and surrounding tissue. This may leave scars, cause disfigurement, and require surgery for treatment.

### **Fat Transfer to the Breasts:**

Fat transfer has been used to improve the appearance of breasts reconstructed after cancer treatment, to improve the appearance of breast deformities, and to enlarge breasts for cosmetic purposes. While there

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## Informed Consent – Fat Transfer Procedures, Fat Grafts and Injections

is limited information regarding the long-term implications of such procedures, there are some potential concerns especially with regard to breast cancer detection. Since the transferred fat may become firm and cause lumps, it may be necessary to undergo radiological studies (mammogram, ultrasound, or MRI) to confirm that these lumps are not due to cancer. It is also possible that the firmness may make it more difficult for you or your doctor to examine the breasts. It is also possible that a biopsy may be needed if there is concern about any abnormal findings in your breasts. However, there is no reason to believe at this time that fat transfer procedures may cause breast cancer.

Fat Transfer to the breast for cosmetic augmentation may require additional surgical procedures to obtain your desired breast size. A limited amount of fat can be injected during each surgical procedure to maintain viability.

### **Fat Transfer to the Buttock:**

Buttock enhancement surgery potentially improves the buttock shape and increases the volume of the buttock. Large volumes of fat transfer are often required. However, the transferred fat may become firm and cause lumps, in addition to other risks such as infection, bleeding, seroma, and fat necrosis. As previously discussed, fat resorption can also occur.

### **Fat Transfer to the Face:**

Fat can be placed throughout the face to give a more youthful appearance. Common areas of fat transfer include the temples, folds around the mouth, cheeks, and chin. This is an alternative to traditional fillers such as hyaluronic acid or hydroxyapatite. Because the fat is living, it is a more permanent solution. Fat transfer to the face may cause complications such as lumps, puffiness, infection, and bleeding. In rare cases, vision abnormalities, including blindness, may occur. In other rare cases, fat transfer to the face may block oxygen supply to the brain, resulting in a stroke.

### **Fat Transfer to the Hand:**

Fat can be transferred to the hands to re-contour them, give a more youthful appearance, and hide some of the underlying structures that become more apparent with age. Besides the complications related to fat grafting in general, fat transfer to the hands may cause swelling and bruising that may last for a prolonged period of time.

### **Donor Sites:**

The removal of fat in the process of fat transfer is often advantageous. The common complications from liposuction can occur at your donor site. Folds, wrinkles, or creases could occur. Some patients may have inadequate donor sites for fat grafting. Typically, these are patients who have had a previous liposuction procedure.

### **Fat Necrosis:**

Fat that is transferred may not survive. Fatty tissue found deep in the skin might die. Fat necrosis may produce areas of firmness within the skin, hard lumps, localized tenderness/pain, or skin contracture. Calcifications and oil cysts may occur. Additional surgery to remove areas of fat necrosis may be necessary. There is a possibility that contour irregularities in the skin may result from fat necrosis.

### **Accidental Intra-Arterial Injection:**

Extremely rarely, fat may be accidentally injected into arterial structures during the course of injection and produce a blockage of blood flow. This may produce skin necrosis in structures or damage blood flow to the eye, resulting in loss of vision. The risks and consequences of the accidental intravascular injection of fillers are unknown and not predictable.

### **Serious Complications:**

Although serious complications have been reported to be associated with fat transfer procedures, these are rare. Such conditions include, but are not limited to, fat embolism (a piece of fat may find its way into the blood stream and result in a serious or life threatening condition), stroke, meningitis (inflammation of the brain), serious infection, blindness or loss of vision, or death.