

Short Communication

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Large Volume Lipofilling with Close System in Aesthetic Plastic Surgery

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Introduction

Fat transfer is also called lipofilling injection or fat transplantation. Injecting fat is a natural, safe and non-allergenic procedure

Human adipose tissue is a tissue with a cell population (adult stem cells) can proliferate and differentiate to multiple cell types: new adipocytes, myocytes, osteoblasts, etc. and it contains a large number of growth factors (GF's) [1]. The most influential is that ASCs stay as ASCs undifferentiated original in the tissue adipose survivor.

During the natural aging process, the fatty tissue that once had a rounded, youthful appearance can begin to break down resulting in wrinkles and sagging skin. Fat injections in these areas help improve.

It can be used to correct large volumes or small corrections, everything depends on the amount of fatty tissue in good condition can be obtained from patient.

Large volume lipofilling

Adipose tissue can be obtained by surgical resection, by tumescent liposuction or ultrasonic liposuction. In the case of the tumescent technique infiltration of adipose tissue it is performed with saline solution 100ml plus epinephrine 1ml and 20ml of lidocaine.

To obtain the tissue cannulas are used, aspiration cannulas to perform the lipofilling procedure that vary in diameter. Normally, cannulas with a diameter of maximum 3mm are used to perform large volume lipofilling.

After obtaining the fatty tissue must be processed to separate the fat cells (adipocytes) of the least useful components (Blood, Plasma, Remains Broken Adipocytes, Free oil) separating normal cells and allowing the injection of a pure tissue. Gravity causes spontaneous separation of the oil, fluid and blood components from the fatty tissue.

Places of "donation" are mainly the abdomen, abdominal and lumbar flanks, and thighs. Fatty tissue can be transferred to buttocks, calves and thighs.

It is important to inject "spaghetti-like" threads of fat in different layers at different levels (structural). This technique allows larger volumes of fat to survive more sufficiently with stable results.

The volume injected is typically higher than expected because the adipose tissue, being alive, is subject to fat metabolism and absorption of part. After approximately six months after the injection, fat cells that have remained alive recover its volume, resulting in a recovery in the volume of the treated area

Advantages of lipofilling

- Easily accessible
- Autologous
- Low morbidity
- "Stem Cells"
- Fat transfer can be combined with other surgical procedures
- An allergic reaction is never present

Disadvantages

The unpredictable resorption rate is the major disadvantage of the lipofilling procedure. It is important to realize that often several lipofilling sessions are necessary to achieve the surgical goal.

Lifestyle (smoking habits), diet, general condition, age, medication and tissue quality at the recipient site will dictate the resorption rate or final outcome. Scientific data and clinical reports have shown that the resorption rate can vary from 20 to up 80%.

Cyst formation after a lipofilling procedure can occur. This is explained by the fact that fat cells could not survive and merge together to form oil cysts. Oil cysts are generally approached with massage or liposuction of the cyst formation [2-5].

References

1. Kotaro Yoshimura, Katsujiro Sato, Noriyuki Aoi, Masakazu Kurita, Keita Inoue, et al. (2008) Cell-Assisted Lipotransfer for Facial Lipoatrophy: Efficacy of Clinical Use of Adipose-Derived Stem Cells Dermatologic Surgery. *Dermatol Surg* 34: 1178-1185.
2. Manuel Meruane, Mariana Rojas (2010) Adipose Tissue Derived Stem Cells, *Int. J. Morphol* 28: 3.
3. Benito-Ruiz J (2013) Injertos de tejido adiposo en cirugía

- estética mamaria. Cir. plást. Iberolatinoam 39: S51-S57.
4. Abdul Kasem, Umar Wazir, Hannah Headon, Kefah Mokbel (2015) Breast Lipofilling: A Review of Current Practice. Arch Plast Surg 42: 126-130.
 5. <http://www.lipofilling.org>