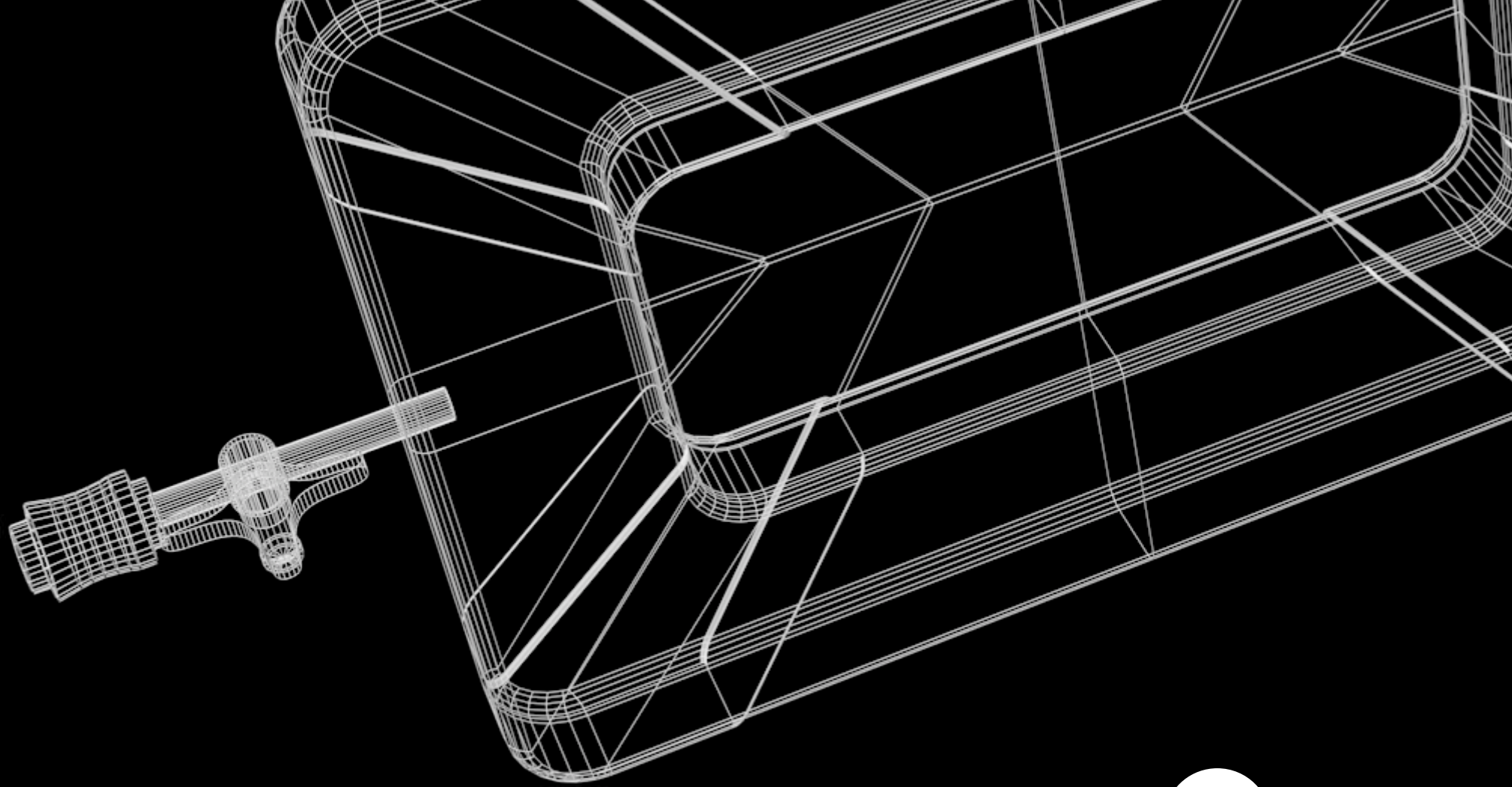


CLOVER

LIPOCELL

LIPOCELL®

CLOVER

Lipocell® is indicated

- In the treatment of osteo-cartilaginous lesions and moderate arthrosis.
- In the management of severe arthrosis in patients who are not candidates for surgery as an analgesic therapy.
- In the treatment of tendon or ligament injuries also in association with tissue repair surgery.
- In aesthetic medicine and surgery to volumise and correct facial defects, reducing the need for synthetic fillers.
- Use in reconstructive surgery where it is necessary to fill in tissue volume losses.
- In the treatment of fistulas, ulcers, wounds and scars

Autologous adipose tissue is rich in mesenchymal cells capable of differentiating into osteoblasts (bone cells), chondrocytes (cartilage cells) and connective tissue cells. This ability promotes the regeneration of damaged joint tissue.

The adipose tissue, once purified, is able to modulate the immune system by drastically reducing inflammation and pain at the site where it is inoculated.

Lipocell® is a European patented system.
The device can boast six specific scientific publications and more than 20,000 procedures performed.

Lipocell® ensures 'gentle' processing by preserving the vascular-stromal niches, the entire extracellular matrix and the related regenerative capacity of the autologous tissue.

The procedure involves a small collection of adipose tissue to be defined according to the desired final quantity (equal to 20% of the initial volume) from the abdomen, buttocks or inner thigh.
The extraction is carried out using specific blunt cannulas with ovoid holes that allow a completely atraumatic procedure.
The extracted tissue is processed using a patented semi-permeable tubular membrane to eliminate pro-inflammatory oily and blood components.
The tissue thus processed preserves both its physical structure, which ensures the graft's high mechanical capacity, and the intact vascular-stromal cell niches.

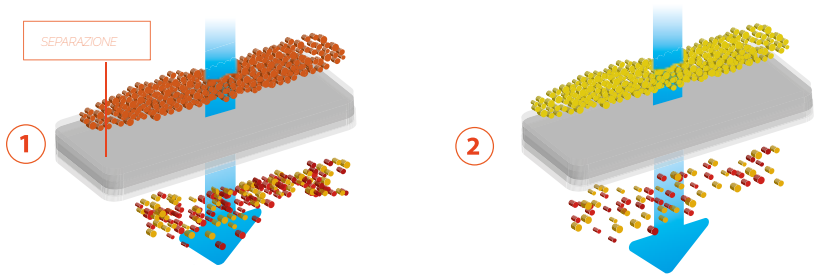
Lipocell® is a technology that enhances the biological properties of adipose tissue.
In fact, fat is one of the richest adult tissues in mesenchymal cells with high regenerative potential.

These cells enclosed in the vascular-stromal niche are pluripotent and can differentiate into specialised cells depending on the graft site.

They also respond to the stimuli of the suffering tissue by releasing anti-inflammatory cytokines and growth factors, promoting tissue healing.

Technology

The Lipocell® device is equipped with a semi-permeable membrane capable of separating fat tissue from oily and haematic residues by continuous washing with RL or physiological saline.
Dialysis of the tissue maintains the integrity of the extra-cellular matrix while minimising stress on the cells.
The end product is purified and clustered adipose tissue.



High regenerative potential

The atraumatic tissue processing and its purification allow the intact vascular-stromal niche to act as a natural scaffold for cells through a trophic and anti-inflammatory action aimed at tissue regeneration.

Simple, effective, safe procedure

Lipocell® is a closed loop system, the process takes place in a sterile field minimising the risk of contamination.

The procedure is simple, quick, reproducible and applicable in many therapeutic areas (orthopaedics, pain therapy, plastic and reconstructive medicine and surgery, general surgery).

Features

- Closed circuit
- Blunt-tipped cannulae with ovolidal holes for atraumatic lipoaspirate collection.
- Patented tubular filter
- Total purification of pro-inflammatory blood and oil residues
- Integrity of the niche vasculo-stromal
- Minimal handling and mechanical stress

A small liposuction

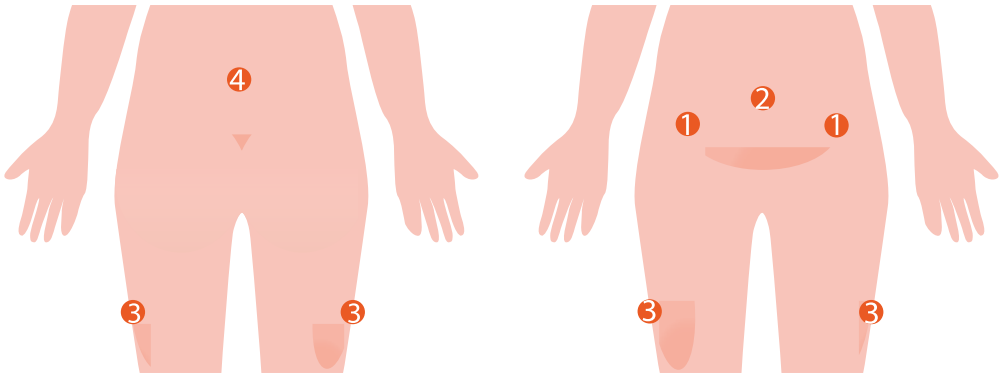
Adipose tissue is harvested with a small liposuction from the subcutaneous fat, preferably in the abdominal region.

The patient is positioned supine and two symmetrical accesses are made between the lumbar and iliac abdominal area (1), alternatively only one periumbilical access (2).

Depending on the patient's characteristics, alternative sampling areas such as trochanteric fat to be performed bilaterally (3) or lumbar (4) can be chosen.

Approximately 60 to 90 ml of lipoaspirate is then taken, resulting in 8 to 18 ml of final product ready to be infiltrated.

The procedure is managed under local anaesthesia thanks to the infiltration of solution for preparing the abdomen for the liposuction procedure preceded by light sedation.



Infiltration

Solution for preparing the abdomen for the liposuction procedure

The purpose of the infiltration is to prepare the adipose tissue for harvesting. Adrenaline, with its vasoconstricting action, reduces
vasoconstriction, decreases bleeding during harvesting, while lidocaine has an anaesthetic effect. The saline solution not only exerts additional pressure with a vasoconstricting effect, but also creates a tumescence that facilitates collection with the suction cannulae.

After making an incision at the points indicated in the illustration, use the infiltration cannula (16G) by connecting it to the 50 ml syringes filled with solution for preparing the abdomen for the liposuction procedure. It is very important to infiltrate the solution homogeneously and during retrograde movements of the cannula (blunt-tipped with ovoid holes, which facilitates the withdrawal and makes the process atraumatic).
Avoid making transverse movements with the cannula.

Once 2/3 of solution for preparing the abdomen for the liposuction procedure has been infiltrated, it is necessary to wait 7-10 minutes before taking the sample.
Digital manipulation of the infiltrated area can be performed to better distribute the solution.

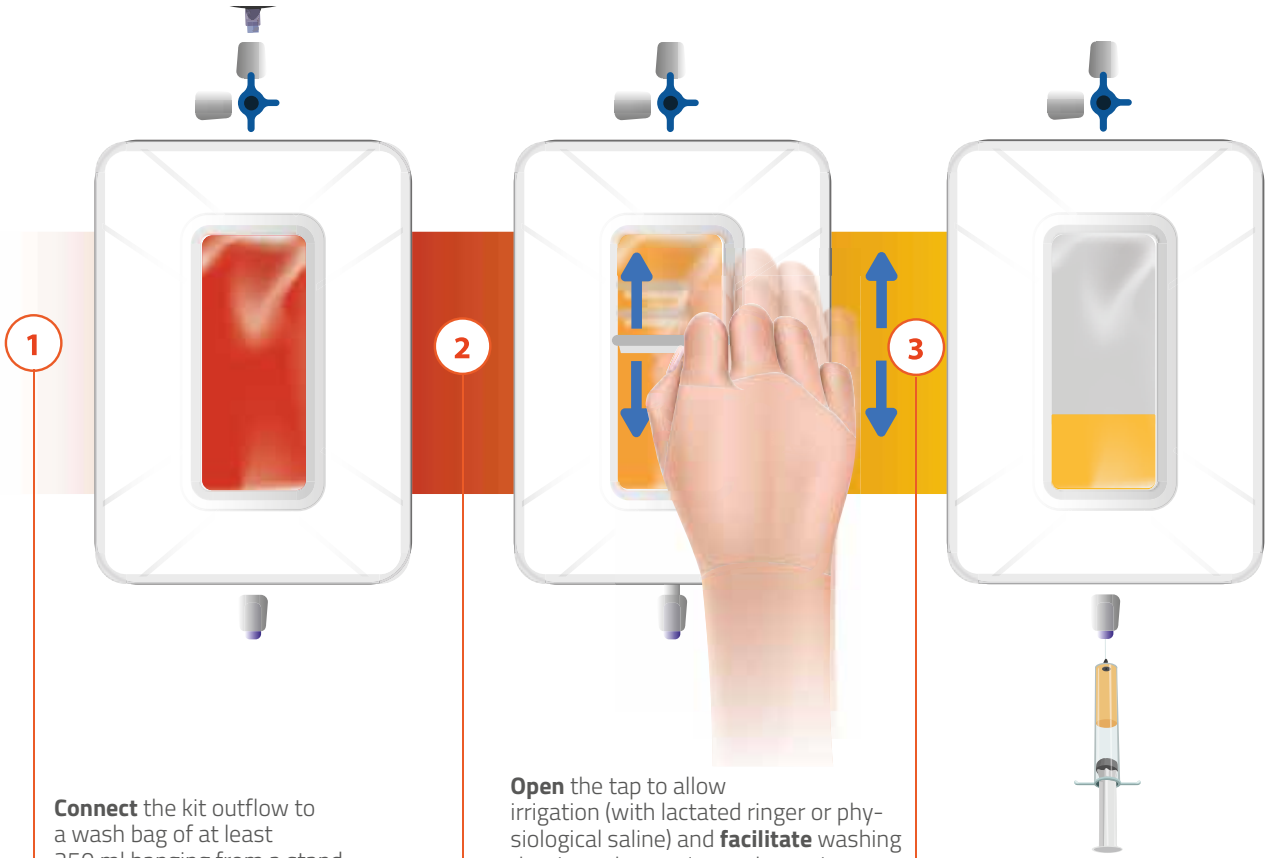
Withdrawal

Once 10 minutes have elapsed, the suction cannula (13G) can be connected to the self-locking syringe.
The locking mechanism, to be activated once the cannula has penetrated the subcutaneous panniculus adiposus, creates negative pressure inside the syringe, facilitating the collection of the liposuction.
Avoid transverse movements with the cannula.

Once the fat has been obtained, it is necessary to dress the collection area.

At the end of the operation it is recommended to apply a compressive dressing on the patient to limit the formation of ecchymosis and haematoma. An elastic belly band worn on average for one week will help to limit this.

Should the product obtained appear very thick, transfer it into the 2.5 ml syringes provided in the kit or into smaller luer-lock syringes to facilitate product release during grafting. You can use the needle provided in the kit, or other needles with a recommended diameter of 18 or 20G.



Connect the kit outflow to a wash bag of at least 250 ml hanging from a stand. Drop the waste bag instead waste bag.
Insert the obtained lipoaspirate through the 'IN' port of the device.

Open the tap to allow irrigation (with lactated ringer or physiological saline) and **facilitate** washing the tissue by moving and pressing gently the bag with the comb with which provided with the kit. Continue until the tissue has taken on the typical yellow colour and the irrigation in the waste tube is clear.

Close the irrigation tap and **remove** excess wash solution with the help of the spatula. Connect a 10 ml syringe to the 'OUT' port of the device and collect the final product ready for use.

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