

Lipomodelling Information Sheet

Lipomodelling is a procedure in which localised deposits of fat are removed from areas of your body where they are not needed and replaced where there is a defect to re-contour elsewhere on the body. This defect may be a result of previous surgery, a result of injury, of ageing or something you have always had. It can be especially effective in combination with facial rejuvenation surgery as it replaces lost volume that has occurred as a result of the aging process. It is also known as 'Lipofilling', 'Fat Transfer' and 'Coleman Fat Grafting'.

This information sheet is a general guide for patients undergoing lipomodelling under the care of Mr Paul Harris and should help clarify some questions that you may have.

Factors affecting your operation, your recovery and the long-term result include your general health, previous surgery, any bleeding tendencies that you have and your healing capabilities, some of which will be affected by smoking, alcohol and various medications. Such issues that are specific to you need to be discussed further and are not covered here. Please feel free to ask Mr Harris any additional questions before you sign the consent form.

What should I consider before having lipomodelling?

If you are planning lipomodelling, it is essential that you have realistic expectations about what the procedure can do for you. It's important to understand that, while lipomodelling can enhance your appearance it won't necessarily match your ideal. So before you decide to have surgery, please think carefully about your expectations and discuss them with Mr Harris.

The best candidates for lipomodelling are those with easily outlined areas of defect with good quality, elastic skin. Age is not a major consideration; however, older patients may have diminished skin elasticity and may not achieve the same results as a younger patient with tighter skin. A larger defect may require more than one session and the possibility of a second or even third lipofilling procedure will be discussed.

How do I prepare for surgery?

Pre-operatively no aspirin containing medication should be taken for one week. If you smoke you should cut down at least three weeks before surgery and stop completely three days before surgery to try and minimise postoperative complications and fat transfer loss, which are more common in smokers. It is important that you do not start smoking again for at least a week after your operation.

When should I stop eating or drinking before surgery?

If your operation is in the morning, you will be asked to have nothing to eat or drink from midnight the night before. If it is in the afternoon, then you should have nothing to eat or drink from 7:00am and you should have somebody to drive you to the hospital.

What will happen when I arrive at the hospital?

You will usually be admitted on the day of surgery, and stay until the afternoon. You will need a friend or relative to accompany you home afterwards.

When you arrive in hospital, you will be seen by a nurse who will talk to you about your general health and examine you to make sure that you are fit for surgery. They may also arrange for you to have some blood tests, a heart trace (ECG) and a chest X-ray especially if you are to have a general anaesthetic. An anaesthetist will visit you to discuss the anaesthetic. Mr Harris will also come and discuss your surgery in detail with you. He will often take some photographs and draw some markings to guide the surgery. You will then be asked to sign a consent form.

Make sure that you are fully informed of and fully understand all the consequences of the surgery prior to signing this. It does not take any of your normal rights away, it merely states that Mr Harris has explained the operation to you and that you have had an opportunity to discuss the anaesthesia with an anaesthetist.

What type of anaesthetic will be used?

Small areas of lipomodelling can be performed under local anaesthetic, so you will be awake through the entire operation. This is usually combined with some intravenous sedation that is administered by an anaesthetist. Heart and lung monitoring is always carried out throughout the procedure and in the early recovery period. For larger areas of modelling, however, general anaesthetic may be used. Once again, this will be delivered by an anaesthetist.

What takes place during the surgery?

Through a tiny incision, a narrow tube or cannula is inserted and used to carefully vacuum the fat layer that lies deep beneath the skin. The cannula is moved through the fat layer, breaking up the fat cells and suctioning them out by a vacuum pump or a syringe.

Once Mr Harris has harvested enough fat tissue, it is processed to separate out the live fat cells. This usual way of doing this is to spin the fat in a centrifuge. This produces three layers in the syringe. The upper layer is an oily substance, extracted from the fat, the middle layer is the concentrated lipoaspirate material (cells), and the bottom layer is the layer containing blood products and cell debris. Only the middle layer is used for lipofilling. Alternative techniques using filtration systems or enzyme digestion are also available but these are less well studied and not routinely used by Mr Harris.

The live or viable cells can then be re-injected into their new site. This is again performed with a syringe and cannula. The cannula size depends on where the aspirate is being placed – the face will need smaller cannulae than the breast, for example. The fat is injected in different layers and in fine, long threads.

These newly injected cells can survive for up to 48 hours without being in direct contact with blood vessels to provide the oxygen and nutrition they need to survive longer term. In the meantime new blood vessels need to form. This process is strongly inhibited in smokers which is why you must avoid smoking for as long as possible before and after your operation.

How long will the surgery take?

The time required to perform your operation varies, depending on the size of the area to be modelled, the amount of fat being removed, and the type of anaesthetic used. However, the entire procedure

often takes between one and two hours. Lipofilling can be combined with other types of surgery that add to the length of the procedure.

What can I expect after my surgery?

After surgery, you will likely experience some fluid drainage from the incisions. To control swelling and to help your skin better fit its new contours, you may be fitted with a specific garment to wear over the harvest (where the fat came from) area for a few weeks. Mr Harris may also prescribe antibiotics to prevent infection.

How long will it take for life to return to normal?

Healing should be relatively quick. You may feel well immediately or need a day or two to recover and you should be back at work within a couple of days. The stitches are removed or dissolve on their own within the first week to ten days. Strenuous activity should be avoided for about a month as your body continues to heal. Although most of the bruising and swelling usually disappears within a two weeks, some swelling may remain for three months or more.

Mr Harris will schedule follow-up visits to monitor your progress and to see if any additional procedures are needed. If you have any unusual symptoms between visits - for example, swelling, heavy bleeding or a sudden increase in pain - or any questions about what you can and cannot do, call Mr Harris' secretary on 0207 927 6520.

How will I feel about my new look?

You will see a noticeable difference immediately after surgery. However, as the swelling settles the change will be less obvious. The initial swelling of the surgery usually takes between seven and ten days to resolve, some of the fat cells that have not survived are also then removed by your own body's immune system, taking several weeks to complete. After about three months the final contour will be visible. If your expectations are realistic, you should be very pleased with the results of your surgery.

Will the injected cells remain?

The process of liposuction is traumatic, which means some of the cells will not survive after they have been suctioned, centrifuged and replaced back in your body. This will vary from person to person and is especially affected by smoking. It may sometimes be necessary to repeat the procedure after a few months if any defect remains. Some cells may be reabsorbed into the body over time and again this will vary considerably between individuals.

The number of fat cells that survive permanently can vary hugely (0 – 70%) because of factors like smoking, the technique used and previous radiotherapy. However, on the whole lipomodelling is not an efficient method of using fat. For general calculation, if Mr Harris suctions 100 mls of fat, this will produce 40 – 50 mls of viable fat cells for injection, of which only about 15 – 20 mls will survive long term. Hence much greater volumes of fat are harvested than are needed at the recipient site.

The cells that survive long term provide both volume and stimulation to the recipient area. From the research that has taken place to date, it appears that some of the cells are relatively simple 'fat cells' and hence provide soft tissue volume for contour change. However, some cells are known as 'Adipocyte-derived Regenerative Cells' (ADRCs), which are more like primitive stem cells. They appear to revitalise the tissue into which they are injected. This can improve the quality of the

overlying skin in facial rejuvenation and also reverse some of the effects of previous radiotherapy in cancer patients.

A proportion of the transferred fat cells survive in their new location, thus they can respond to future weight change in the way they would have done on the body. For example, if large volumes of lipomodelling are performed on the face and then the patient's weight increases dramatically, patients may see their facial soft-tissue volume also increase.

Does lipomodelling carry any risk?

Lipomodelling is normally safe particularly when being performed by a fully trained and accredited plastic surgeon like Mr Harris. Although larger volumes of fat are harvested than are needed, compared to liposuction for cosmetic reasons, relatively small amounts of fat are removed overall and the risks are minimal.

The scars from liposuction harvest are small and strategically placed to be hidden from view. The bruising may be extensive and will take several weeks to dissipate. The skin surface may be slightly irregular and a compression garment can be used to reduce the chances of this. Numbness and pigmentation changes may occur but these should settle after several months.

The recipient area that has been injected with fat will be bruised, swollen and inflamed. This should settle over the first few days. If the swelling and redness worsens then this could be an infection developing and you should contact Mr Harris or one of his team. After several months, the volume replacement may be inadequate and sometimes additional lipomodelling is required to achieve the desired result.

In lipomodelling to the face, there have a small number of reported cases worldwide of post-operative blindness affecting one eye. This is as a result of fat being injected directly into a blood vessel that then tracks to the back of the eye and blocks the blood supply to the retina. This is known as 'fat embolus' and can also happen with other types of injectable material, such as a dermal filler. Injection techniques have been described in an attempt to avoid this devastating complication and it is therefore important to only undergo lipomodelling by a fully trained surgeon who regular performs this surgery. Fat embolus can also happen with very large volume injections elsewhere on the body, such as the bottom. This fat could theoretically travel to the lungs and cause cardio-respiratory arrest. Such cases have only been reported in patients who have travelled abroad for 'cut price surgery' usually performed by individuals with dubious credentials and limited emergency healthcare support.

The Practice

Mr Harris practices from 5 Devonshire Place in Central London, where he also performs minor outpatient procedures. Assisted by his regular anaesthetist, he operates at The London Clinic (<http://www.thelondonclinic.com>) and at The Royal Marsden Hospital, Fulham (<http://www.royalmarsden.nhs.uk>). He also consults and operates at Parkside Hospital, Wimbledon (<http://www.parkside-hospital.co.uk>). All provide a full range of medical support services.

Main correspondence, appointments and administration

Many patients are referred by their General Practitioner. You may, however, arrange your own appointment with Mr Harris, without referral.

Please refer all correspondence to:

5 Devonshire Place
London
W1G 6HL

For appointments please contact:

appointments@paulharrisplasticsurgeon.co.uk, tel: 020 7927 6520

For information and payments:

admin@paulharrisplasticsurgeon.co.uk, tel: 020 7927 6521

For nursing support please contact:

nurse@paulharrisplasticsurgeon.co.uk, tel: 074 9622 8878