This document has been formulated under the authority of the French Society of Plastic Reconstructive and Aesthetic surgery (Société Française de Chirurgie Plastique Reconstructrice et Esthétique - SOFCPRE) to complete the information that you received in your first consultation with your Plastic Surgeon. It aims to answer all the questions that you might ask, if you decide to undertake arm inner side lifting.

The aim of this document is to give you all the essential information you need in order to make an informed decision, with full knowledge of the facts related to this procedure. Consequently, we strongly advise you to read it carefully.

DEFINITION, AIMS AND PRINCIPLES

Movement as well as repeated weight loss asks a lot of the skin of the underside of the arm. This is why skin ptosis (sagging not amenable to an isolated aspiration) is more common than the simple fat hypertrophies.

This is what we call the arm lifting or the underarm lifting. The aim of the surgery is to remove the excess of skin, to decrease the underneath fat infiltration and to redistribute the skin.

These lesions are do not justify any reimbursements by medical insurance except when following surgery for gross obesity where in may be considered under certain conditions.

BEFORE THE OPERATION

A meticulous clinical examination will determine the most appropriate type of surgical procedure for each individual patient (choice of incision, indication of associated lipoaspiration or not).

During the first consultation, precise information on the different surgical steps, the follow-up and the expected results will be given to you. Particularly where the scar will be placed will be well precisely explained.

An usual pre-operative evaluation is done, following the prescriptions.

An anaesthesiologist must be seen in consultation, at least 48 hours before surgery in case of general or “vigil” anaesthesia.

It is seriously recommended to stop smoking at least one month before surgery (smoking can cause delay in healing)

No medicine with aspirin in it must be taken for at least 10 days before surgery.

Depending on the type of anaesthesia, fasting (no food, no beverage) for 6 hours before surgery may be required.

HOSPITAL STAY AND TYPE OF ANESTHESIA

Type of anaesthesia: Underarm lifting can be performed under general anesthetic under local anesthesia with added tranquilizers injected in (‘vigil’ anesthesia) or, in some cases, under simple local anesthetic.

The choice between these different techniques will be made after discussion with the surgeon and the anaesthesiologist.

Hospital stay: The surgery can be done in the “day care” department; it means, you can leave hospital on the day of the surgery, after a few hours of resting and medical supervision. However, it may be advisable to stay in hospital over the night; it means, you enter the hospital early morning, the day of surgery (or sometimes the day before in the afternoon) and leave it the day after surgery.

THE PROCEDURE

Each surgeon uses his own technique, which he adapts to each case, in order to get the best result.

The different techniques have been described. Fat infiltrated in to the skin is removed by lipoaspiration. The skin excess is removed, leaving a scar whose location and length depends on the amount of skin laxity and on the procedure chosen.

The incisions can be vertical, longitudinal, along the underarm.
or horizontal, following the armpit fold. Sometimes, both types of incisions are combined.

### Arm lifting with longitudinal incision along the underside of the arm

This surgical procedure corresponds, mainly, to patients with major skin laxity are very motivated and clearly expressed their motivation: as well as the aesthetic embarrassment (discomfort when wearing short sleeves due to the wrinkled- appearance of the arm) there may also be functional discomfort (mobility or clothing discomfort as redness or maceration of the arm inner side).

When there is significant infiltrated fat. The first step will be a lipoaspiration. Then, the excess skin is removed using a longitudinal incision along the underarm. The amount and the topography of excess skin will be placed with limits decided and marked before surgery in collaboration with the patient while in a standing position.

The average time of the surgery is one hour and half. It may vary, depending on the extent of improvement needed. At the end of surgery, a compressive dressing is applied.

This type of arm lifting technique effectively corrects skin and fat excess but leaves a scar on the under side of the arm. This scar often remains visible; that is why an especially rigorous selection of the surgical indications and a perfectly informed and consenting patient is required for this type of surgery.

Considering the disadvantages of this type of arm lifting, from the point of view of the scar, we try to propose, as often as possible, a less ambitious surgery but with more acceptable scar: it may be an arm lifting with an isolated armpit incision or a combined procedure with an armpit incision and a short vertical one of less than 10 cm.

### Arm lifting with horizontal armpit incision

This type of surgery is aimed at a patient with less excess skin and laxity mainly located on the upper third of the arm.

From a single horizontal incision, hidden in an armpit fold, combined, if necessary, with a lipoaspiration, we can remove the excess skin from the upper part of the under arm. The sutures inside the armpit allow the residual skin to be re-draped upwards toward the armpit.

The residual scar is usually not very visible but the morphological result is less dramatic that the one obtained with a vertical scar arm lifting.

The average time of surgery is one hour.

At the end of surgery, a compressive dressing is applied. Because this procedure is lighter than the previous one, we can do it, most of the time, as day care, surgery under local or twilight anaesthetic.

Such a surgical procedure is certainly less ambitious than the previous one but the main interest of it is its simplicity and lightness, allowing the possibility to redo it, once or twice within a few years. The repetition of this procedure will allow, each time, to improve the result (according to the patient wishes) due to complementary skin resection and redraping without increasing the length of the scar which should stay inside the armpit.
Combined technique

This is a synthesis of both previous procedures, realizing a compromise either concerning the advantages or the disadvantages particularly from the point of view of the scar. This technique combines a horizontal incision inside the armpit, with a short vertical one of less than 10 cm, on the underarm.

THE SURGICAL FOLLOW-UP

It is usually possible to leave hospital the same day or the day after surgery. During the early follow-up period, ecchymosis (bruises) and oedema (swelling) can appear. They will decrease within 10 to 20 days after surgery. Pain is normally limited to discomfort, well controlled by usual pain-killers. The healing period can be a little unpleasant due to the skin tension around the scar edges. So, during this period any brusque stretching motion must be avoided. The necessity to stop working will depend on the type of the professional activity. Sedentary work can in most cases, can be undertaken again quickly, within a few days after surgery. Sporting activity or working out can be done, progressively, again within 4 weeks after surgery. The scar is often pink-red during the first 3 months following surgery; after then it usually decreases progressively during 1 to 2 years. This depends on the patients own skin specificity. During the first 3 months following surgery, the scar must be protected from the sun and UV beams, by using sun blocks.

THE RESULT

It will be appreciated within 6 to 12 months after surgery. Most of the time, we can see a good correction of fat infiltration and skin laxity, which greatly improves the aspect of the arm. The functional improvement is also very clear, especially in case of longitudinal incision arm lifting. The scars are usually visible, particularly the longitudinal one, along the underarm which is not hidden in a natural fold. Thanks to the technical improvements and to acquired experience, the results of this surgery have improved. The object of this surgery is to improve the appearance but not to obtain perfection. When expectations are realistic this surgery can give great satisfaction. It remains, nevertheless, a delicate surgery and even a very rigorous technique never totally protects from a certain amount of imperfections or complications.

IMPERFECT RESULT

Most of the time, a well-indicated and a well-done under arm lifting is of real benefit to the patient and has satisfactory result as anticipated. However, localized imperfections are not rare and can be seen, these are not, however real complications:

- These imperfections could concern the scar. It can be too visible, too wide or stuck to underlying tissue. When there is too high tension on the sutures, It can cause the scar to have an unpleasant appearance (hyper-pigmentation, thickness, retraction, adherence or enlargement). It should be remembered that scars decrease with time but never disappear totally. It should also be remembered that if it is the surgeon who sutures it is the patient who produces the scar. Therefore it is the patient's own healing process which will decide the quality of their scar. There is always a risk of developing a hypertrophic scar requiring a specific treatment.

- Concerning the results of the lipoaspiration, they may show either a insufficiency of correction, a slight residual asymmetry or small irregularities of the skin. These imperfections of the result can usually be treated by complementary beneficial surgery, so called “slight surgical touching up”, done under pure local or local anaesthesia with sedation. But, no secondary surgery should be done until at least 6 month post-operatively, when the result begins to be stable.

POSSIBLE COMPLICATIONS

Even if it is done for aesthetical purpose, inner arm lifting remains a true surgical procedure, what means, it carries the same risks as any surgery however rare they may be. One should separate the complications of anesthesia and those of surgery.

- Concerning anaesthesia, it's the anaesthesiologist, himself, who will inform the patient of specific risks. It is necessary to be aware that, that anaesthesia may cause unpredictable reactions, which are more or less easy to control: having a competent anaesthesiologist, working in a real surgical environment, statistically reduces the risks to an almost insignificant level. Modern day techniques offer the patient optimal security, especially as the patient is in good health.

- Concerning surgery, by choosing a qualified competent plastic surgeon, well trained for this type of surgery, you limit as much as possible the risks without totally eliminating them however. Complications could always occur after an arm inner side lifting which remains one of the more delicate procedures in the field of aesthetic plastic surgery. Among possible complications should be mentioned:

- General complications: Thrombo-embolic incidents (phlebitis, pulmonary embolism) are quite rare but are among the most dangerous. Rigorous preventive care decrease their occurrence, this may include wearing compressive stockings, being out of bed quickly following surgery or sometimes by using anticoagulant drugs.

- local complications:

  - the occurrence of an haematoma is quite rare but could require evacuation to protect the quality of the aesthetic result.

  - the risk of an infection is by increased by the proximity of a natural fold (which usually contains a pool of bacteria), it can be prevented by meticulous hygienic during the
pre- and post-operative period, up to complete healing. If necessary, surgical drainage and antibiotics can be required. One should be aware that infection can leave non aesthetic sequels.

- **the occurrence of persistent lymphatic flow** may be seen. It can reach the point of an effusion (swelling), which can need to be evacuated but in most case, will disappear spontaneously without sequels.

- **Skin necrosis** can exceptionally be seen. It is usually limited and localized. To avoid necrosis, the arm lifting must be well-indicated and the surgery well-adapted and carefully done.

- **Sensitivity troubles**, especially along the inner side of the arm can be seen. Normal sensitivity, most often, reappears within 3 to 6 months after surgery.

All things considered, the risks must not be overestimated, but you must be conscious that an operation, even a minor one, always has some degree of unforeseeable unknown factors.

You can be assured that if you are operated on by a qualified Plastic Surgeon, he or she will have the experience and skill required to avoid these complications, or to treat them successfully if necessary.

These are the facts which we wish to bring to your attention, to complement what you were told during the consultation.

Our advice is for you to keep this document and to read it and think it over carefully after your consultation.

Once you have done this you will perhaps have further queries, or require additional information.

We are at your disposal should you wish to ask questions during your next consultation, or by telephone, or even on the day of the operation, when we will meet in any case, before the anesthesia.

**PERSONNAL OBSERVATIONS :**