

## Cryolipolysis

*Last update on May 23<sup>rd</sup> 2023*

### **WHAT IS CRYOLIPOLYSIS?**

The technique of cryolipolysis, sometimes called Coolsculpting™ (brand name of the first device, developed by Harvard Medical School and Wellman Institute of Boston), is a non-invasive medical technique for the treatment of localized fatty deposits by the cold.

### **HOW DOES CRYOLIPOLYSIS WORK?**

The fatty deposit will be aspirated into a small silicone cavity, where it will be exposed to intense and controlled cold for a predetermined time.

This exposure to cold will cause selective destruction of the fat cells only, since they are more sensitive to the cold than the surrounding tissues. Gradually, fat cells will be eliminated, to be recycled into other cells or components of the human body. The elimination will be progressive over the next three months.

### **IS CRYOLIPOLYSIS PAINFUL?**

Cryolipolysis is not a painful procedure and is performed in the office without anesthesia.

A feeling of discomfort is felt during the first minutes of treatment, related to the phenomenon of aspiration. This sensation disappears rapidly during the cooling phase thanks to its analgesic property.

After the session, we could observe the same pain as after an intense sports session (like sore muscles), more rarely a sensation of moderate superficial burns.

There is not any social eviction; no specific care are needed after the session.

### **IS CRYOLIPOLYSIS DANGEROUS?**

Cryolipolysis is an extremely safe procedure when performed correctly, by a serious dermatologist and with a reliable device. Be careful to choose the practitioner who performs it, according to his competence, and the material he has, because several cases of severe burns with deep necrosis have been described, following the use of some unreliable materials but claiming a cryolipolysis action. Your practitioner will tell you the exact type of device he is using.

The main side effects are minor, benign, and reversible: ecchymosis, edema, induration, abdominal discomfort, superficial burns, or loss of sensitivity, always transient. Some cases of hernias related to aspiration have also been described which contraindicates the technique in patients who have undergone surgical digestive surgery on the area of aspiration.

The selective destruction of subcutaneous fat may sometimes accentuate the feeling of slackening, although it has been shown that the technique tends to tone the skin. In the same way, irregularities can sometimes occur, which can be corrected by additional sessions.

Finally, some exceptional cases of paradoxical fatty hyperplasia (the inverse of the desired effect, with an average increase of 20% of the treated fat fold) have been reported. Their frequency is estimated around 1 case out of 1 000 to 10 000. Studies have shown that although the destroyed fat is removed by blood, there isn't any change in blood cholesterol, since the effect is progressive and spread over about 3 months.

### **WHO CAN BENEFIT FROM CRYOLIPOLYSIS?**

Cryolipolysis is indicated for people with moderate fatty deposits. These deposits must be sufficiently limited to be aspirated by the transducer applied on the fat fold. This will be assessed in advance by your doctor.

The best indications are the medial and lateral abdominal fat folds ("love handles") and the back. Other areas can be treated: thighs, knees, or other areas that can be aspirated into the device.

Some devices also allow the treatment of the external lateral surface of the thighs ("horse breeches"), double chins or pseudo-gynecomasties in men (fatty hyperplasia of men's breasts).

Orange peel or isolated slackening, cellulite with pad (small cupuliform depressions) are not great indications, but can be improved by other techniques. Finally, a session of cryolipolysis can never replace a diet if needed.

### **WHEN CAN WE SEE THE EFFECT?**

The effect is usually visible 2 months after the treatment, but can be accentuated until the 6th month.

### **IS IT POSSIBLE TO GUARANTEE A PERFECT RESULT?**

The technique allows in one session an average reduction of 25% of the fat of the treated area. 90% of patients are objectively responding and satisfied.

Factors that can lead to insufficient results are sometimes foreseeable: poor indication and / or unreliable device, bad hygiene of life and especially food. As after a liposuction, if the diet is too rich in sugars or fat, the adipose tissue can "re-inflate"...

Rarely, even under the best conditions, the results may be insufficient or possibly null due to genetic factors generating fat cells less sensitive to cold than the average of individuals.

### **HOW MANY SESSIONS ARE NEEDED?**

The effect is usually visible from the first session. It is nevertheless possible to improve the results by 1 or even 2 additional sessions.

### **WHAT ARE THE ADVANTAGES OF CRYOLIPOLYSIS UPON SURGERY?**

Cryolipolysis is less effective than surgery, especially on large fat folds, but has some advantages. The main is its non-invasive character which will allow treatment directly in the practice without anesthesia, pain or scars. The other advantage is the progressive fatty destruction which will limit the phenomenon of slackening and irregularity of the skin regarding the treated areas. These phenomena of empty "bags" or "waves" are sometimes significant after liposuction.

### **WHO ARE AUTHORIZED TO PROPOSE CRYOLIPOLYSIS?**

Only physicians are allowed to use cryolipolysis devices. Your dermatologist has been trained to use this medical technic which is certainly non-invasive but can cause, like any effective technique, negative results in case of misuse.

**This information sheet recommended by the French Laser Society can be given to you by your dermatologist. Even if it is not sufficient to have an estimate, it helps to give the patient a clear information.**

*The information consultation provides clear explanations on expected outcomes, side effects and possible complications. There are not any reimbursement from social security or medical leave for these aesthetic treatments. Prices are mainly based on the area to be treated. The total cost is to be evaluated with the patient and is the subject of a signed quote.*

*A post-operative order and an advice sheet are given to the patient with the doctor's contact information.*

COPYRIGHT SFLD