

Calf Implant Surgery

Calf implants are used to enhance the shape and/or increase the size of the calf. Patients generally wish to have a better shape and more definition of their calves and lower legs and may not be able to achieve this by exercise alone. It is important not to over augment the area or an appearance can be created which looks abnormal or unusual.

Indications for calf implant surgery

- Desire for an increase in the size of calf
- Improvement of shape or definition of calf/lower leg
- Correction of asymmetry between legs
- Improvement of proportions between lower legs and thighs

Limitations of calf implant surgery

- Excessively large implants will not enhance your appearance more, rather they will give an unnatural appearance. It is important to keep proportions and balance in mind when discussing and choosing your implant.
- If you have had previous surgery or infections or have very thin leg skin and tissues, you may not be suitable to have an implant inserted
- If the skin on your legs is very tight, there may not be enough space to properly insert a calf implant without causing too much pressure

Alternatives to calf implants

- Augmentation with your own tissues e.g. fat transfer. This will give a long lasting effect but can mean more one surgery to transfer the fat in most situations as your body will absorb a small amount and there is a limit to the amount that can be transferred in one session.

Combination procedures

Calf implants can be combined with fat transfer to augment the calf area. This may be a better option than two implants or than larger implants.

Before the procedure

- To minimise the risk of infection, it is important that your skin is healthy and that there are no infections or cuts in the area.
- Your calf will need to be measured and the calf implants ordered in advance
- Stop smoking and nicotine products
- Avoid aspirin, some anti-inflammatory medications and some vitamin and herbal supplements as they can increase bruising and bleeding

Types of implants

- Silicone gel. Soft implants that are available in symmetrical and asymmetrical sizes.
- Solid silicone. Firm implants which can be custom-carved. These are rarely used nowadays.

Procedure details

Calf implant surgery is normally carried out under general anaesthesia as a day case procedure with you prone or lying face-down on the operating table. Calf implants are usually inserted via an incision at the back of your knee into a space between the muscle and the skin or in some cases underneath/within the muscle. The implants are made of silicone and are safe to be placed inside the body. One or two implants are placed as needed in each leg. If two implants per leg are being considered, this is often done as a staged (over two sessions) surgery. Alternatively fat transfer may be done instead of the second implant – this is often a better option than a second implant.

Post-operative course

It is usual to have some swelling and bruising in the area around the implant, which will settle over 2 to 6 weeks following surgery. Swelling usually peaks around day 2 to 3 post surgery and will gradually reduce after that. Most of the swelling is usually gone by 2 to 4

weeks but can last longer than this. Sometimes you will have numbness in the leg or foot temporarily.

Recovery

You are advised to avoid any heavy or strenuous activity during the healing process (6 weeks). Sleep with your legs elevated on pillows at night to help reduce swelling. You can shower from 48 hours post-surgery but will need to let your dressing tapes dry before dressing. You will need to be careful walking and may need assistance for the first couple of days. Gradually you will be able to build up the distance you can walk. Normal walking returns during the second and third week after surgery. Most people can return to work after 1 to 2 weeks and get back to normal activities after 6 weeks. The scars usually heal very quickly and gradually fade to fine lines. Do not disturb the implant by feeling it or trying to see if it will move. It can take a few months after the surgery to see the final result.

Other points about calf implant surgery

Ageing

Calf implant surgery has a high success rate and is an excellent procedure for reshaping legs. The effects are very long lasting. However, it is important to realise that as the years go by, our leg tissues do not stay the same. Our skin and underlying fatty tissue gradually thins, loosens and changes shape. This can mean that you may wish to have calf implants removed or replaced in years to come as your overall leg appearance changes and the effect of the implant changes.

Weight changes

Differences in leg soft tissue volume can also be seen with significant gains or losses of weight. This can mean that you may wish to have calf implants removed or replaced in years to come if your overall leg appearance changes and the effect of the implant changes.

Future information about implants

Silicone implants began to be used for breast augmentation in the 1960s. Calf implants have been developed more recently than this. There have been advances in how the implants are made, in surgical technique and in understanding the long-term effects and

side effects of calf implants. This research, knowledge and development continues. It is therefore important for you to be aware that there may be new effects or side-effects or risks of calf implants discovered and medical advice regarding calf implants may change in the future as new information becomes available.

Need for future surgery

It is important to realise with any type of implant placement, future surgery is always a possibility. This may be because of a problem with the implant, a change in your body shape or tissues or a change of mind regarding having calf implants in place.

Complications

Early complications (within the first week of surgery)

Problems with the anaesthetic.

You will need to be turned face down for this surgery which adds to the risk of the general anaesthetic as there is potential for problems such as breathing difficulties. You will need to be assessed as medically fit to undergo a prone anaesthetic for this surgery.

Bleeding (haematoma)

It is normal to have some mild oozing from the surgical incision for a few days following a calf implant surgery. If there is any suggestion that excessive bleeding after calf implant surgery has occurred, you may need to go back to the operating theatre to have the bleeding stopped and the wound washed out to evacuate the collected blood.

Seroma

Clear fluid can occasionally build up around the implant. If significant, this may need to be drained.

Infection

Rates of severe infection in calf implant surgery are low. Minor wound infections or inflammation may occur - if it does happen, an infection will be treated with antibiotics. Sometimes a return to theatre or the procedure room may be needed to washout or further treat the wound. If the area around the implant becomes infected, the implant may have to be removed. It is sometimes possible to replace the implant at a later stage once the infection has resolved and the leg tissues have recovered but not always.

Compartment Syndrome

This when the volume of the implant in combination with swelling after surgery exerts too much pressure on the other tissues of the leg. This can damage the blood supply, nerves and muscles in the leg and potentially this damage is irreversible. Signs of this happening include severe pain developing in the leg along with a very tense calf, nerve weakness and reduced blood supply or pulses. The treatment is to remove the implant and usually to make incisions down each side of the leg to relieve the pressure inside.

Blood clots

Blood clots in the veins of the legs (DVT - deep venous thrombosis) are possible after calf implant surgery. Occasionally they can break off and travel to the lungs causing serious breathing problems that can be fatal. If a DVT does develop, you will need various investigations and treatment as appropriate. The risk can be reduced further by drinking plenty of water postoperatively and gently mobilising. A pulmonary embolus (PE) describes a blood clot that has broken off from the DVT and lodged in the blood vessels in the lungs. This can be serious (at times, fatal), and again, appropriate investigations and treatment are instigated should this be suspected after your operation.

Intermediate complications (within 6 weeks of surgery)

Delayed wound healing

In some people the wounds take longer to heal than in others: this may be due to having had a mild infection of the wound, due to a reaction with the stitches or from “overdoing it” straight after surgery. Normally this is a minor inconvenience, which can be managed with observation or special dressings as an outpatient. Occasionally it can lead to a troublesome infection developing as described above.

Wound dehiscence

Occasionally some of the wound can open or gape. This is normally only a very small area and can be managed by observation and wound care. It usually does not leave any lasting problems. Rarely, the wound may need to be resutured or the implant removed to allow it to heal.

Persistent swelling

Some swelling to the area around the implant is normal after a calf implant operation. Most of the swelling usually resolves during the first 6 weeks after surgery. In some cases, it can be more severe and persist longer than usual.

Asymmetries and irregularities

While no-one is perfectly symmetrical, and no two sides of a leg and no two legs are 100% symmetrical, every effort will be made to achieve good symmetry after your surgery. However, there will inevitably be subtle differences between each side. Occasionally there are significant asymmetries and irregularities that need to be addressed with further surgery (a revision operation).

Numbness or hypersensitivity

It is usual to have temporary numbness of the lower leg after calf implant surgery. This is because the nerve that feeds back sensation from these areas lies very close to where the implant is placed and may have to be crossed over during the surgery to place the implant. This usually resolves during the first few weeks but occasionally may persist longer and rarely leaves an area of permanent altered feeling or numbness.

Weakness of leg movement

Occasionally there is weakness of one or more of the leg muscles following implant surgery, resulting in weakness walking. This is usually temporary and resolves but rarely can be permanent.

Nerve damage

The most significant nerve that can be damaged is the tibial nerve behind the knee where the surgical incision is made. This can result in significant weakness of movement in the leg which may be permanent.

Late complications (more than 6 weeks from surgery)

Poor scar formation

Scarring will occur whenever the skin is cut and of course, every effort is made to place scar lines where they will heal well and be least visible. Although scarring on average is minimal, scar maturation varies from person to person and occurs over 6 to 12 months,

with scars passing through a red, itchy and lumpy phase, prior to settling down to thinner, softer less distinct lines. Normally the scars from calf implant surgery heal well and are barely perceptible. Occasionally, they may tend to thicken and may require steroid injections to help them settle down. In some cases, minor surgical scar revision surgery may be needed. Hypertrophic or keloid scars can occasionally occur – these are thickened and lumpy scars that are more common in people of Asian or Afro-Caribbean descent. Small asymmetries in scar level or thickness have to be accepted as part of the normal healing process.

Movement of the implant

Sometimes an implant can slip out of place and require more surgery to adjust or replace it. Please do not try to test this, as with enough force all implants can move even if correctly positioned.

Visible or palpable outline of the implant

Occasionally the outline of the implant may be visible through the skin. This is more likely if the overlying tissue/skin is very thin and/or the implant is large. This is more common with solid silicone implants or large implants and if the overlying skin and tissues are thin.

Unnatural appearance

Sometimes calf implants can give an unnatural appearance to the leg. This is more common if the implant is large proportional to the leg.

Capsular contracture

This is rare but can occur in the long term with silicone gel implants. It is when excessive, tight scar tissue forms around the implant. The implant starts to feel harder and the shape may be distorted. It may be uncomfortable. The treatment is removal of the implants and scar tissue with or without replacement of the implants.

Size issues

Some people are unhappy with the size of implant they have and wish they had chosen a different option. Getting the pre-operative sizing right is crucial, as once the implants are in, it takes further surgery (and cost) to change them. Therefore, if you have any doubts or anxieties about the size you have agreed, it is vital that you let us know before your surgery.

Chronic pain

Occasionally patients suffer from chronic pain after surgery. This is not always predictable or easily treated. It is more likely to occur if you suffer from severe or complex pain prior to your surgery. Further surgery or referral to a pain specialist may be indicated in this situation although it must be appreciated that there is not always a surgical solution to chronic pain.

The sub-optimal result

Despite performing the operation as accurately and carefully as possible, some people will feel that their result is not exactly as they were hoping it would be. This may be due to one of the problems described above occurring or due to unrealistic expectations of the surgery e.g. mild asymmetries, visible scarring or less than expected effect or not realising another procedure e.g. fat transfer would be needed as well to gain the best result. An understanding of what is realistically achievable in your particular case is essential prior to undergoing surgery. Should you be left with a sub-optimal result, this will be discussed with you along with the subsequent appropriate treatment options. Treatment may include revision surgery. Extra charges may be applicable for further surgery in some circumstances and this will be discussed with you.

Longevity of procedure

Calf implant surgery has a high success rate and is an excellent procedure for reshaping legs. The effects are very long lasting. However, it is important to realise that as the years go by, our leg tissues do not stay the same. Our skin and underlying fatty tissue gradually thins and loosens. Differences in leg soft tissue volume can also be seen with significant gains or losses of weight. This can mean that you may wish to have calf implants removed or replaced in years to come as your overall leg appearance changes and the effect of the implant changes. It is important to realise with any type of implant placement, future surgery is always a possibility.