

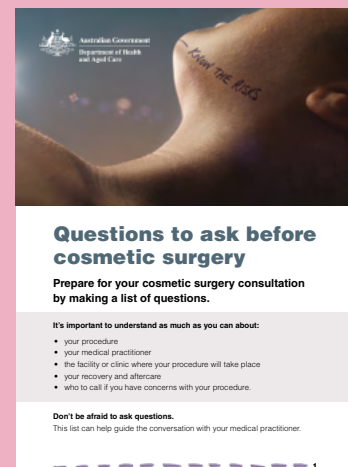
Questions to ask your doctor before lipoedema surgery

Some patients can feel overwhelmed by having to choose a suitable doctor for their lipoedema surgeries, without fully understanding the criteria to be able to make this decision.

The Australian Government has developed a brochure that outlines questions to ask before cosmetic surgery. While lipoedema surgery is not cosmetic, we feel the questions outlined in this brochure are important questions to ask your doctor before any surgery.

We have answered the questions proposed by the Australian Government in this brochure and we encourage you to get a second opinion before deciding on your Lipoedema doctor, and ask each doctor you are considering about their experience and expertise in treating Lipoedema.

Ensuring your Doctor is an expert in Lipoedema surgery is the best first step.



QUESTIONS ABOUT YOUR PRACTITIONER

1. What are your qualifications?

The doctors at Lipoedema Surgical Solution are primary care doctors with a special interest in Phlebology. Phlebologists are experts in managing swollen limbs caused by venous, lymphatic and lipoedema diseases. Our doctors are sub-specialised in lipoedema surgery based on the 20 year German Lipoclinic protocol and Dr Lekich's formal training in Germany in 2017 with Dr. Heck and his surgeons.

Dr Lekich has further expanded this German lipoedema / lymphoedema extraction surgery, to develop the Lipoedema Surgical Solution and Miami Private Hospital protocol, to include the management of comorbidities including holes in the heart and varicose veins prior to surgery for optimal safety and recovery.

The doctors at Lipoedema Surgical Solution are formally trained to manage lipoedema and perform lipoedema / lymphoedema extraction surgery as per the German Lipoclinic, which goes beyond general liposuction used for cosmetic and plastic surgery. This protocol and scope of practice has been documented and submitted to all the major medical defence organisations in Australia advocating for changes so that lipoedema is treated as a disease to make the surgery more accessible and more affordable.

At Lipoedema Surgical Solution we have created our own formal SITA (Surgery in training and Assessment) mandating 100 directly supervised surgeries to cement

expertise and scope of practice under the Lipoedema Surgical Solution and Miami Private Hospital protocols.

It is important to note that no specialist college in Australia provides formal training in lipoedema surgery, and in fact most surgeons have never been trained in Lipoedema at all. The titles 'surgeon' and 'specialist' implies that a doctor has graduated from a specific medical college that provides allowance for their graduates to be called a 'surgeon' or 'specialist'. Doctors who haven't graduated from these colleges cannot use the title surgeon, even though they can perform surgery. Specialist registration does not assume expertise or scope of practice where the management of specific medical conditions, such as lipoedema, are not part of their college curriculum.

For a doctor to be able to practice, their scope of practice is scrutinised by their Medical Defence Organisation (which is the insurance they must have to be allowed to practice), peer review, and approval by the Medical Advisory Committee at the hospital where they perform surgery.

Please be assured there are several questions you could ask your doctor before surgery, and the best questions are not 'are you a surgeon?' or 'are you a specialist?' as these questions do not really provide much clarity on a doctors training, experience, or outcomes.

Dr Chris Lekich

Dr Lekich is the Medical Director of Vein Doctors Group, Lipoedema Surgical Solution, Metrocentre, and the CEO of Miami Private Hospital. He has worked in operating theatres for over 30 years and has been credentialled to operate in private hospitals in Queensland, New South Wales and Victoria. Dr. Lekich has conservatively managed lipoedema for over 18 years, before shifting to surgical management of the disease once he established the purpose-built, licensed, Miami Private Hospital in 2016 and completed training in Germany with Dr Heck in 2017.

Dr Lekich is passionate about training doctors with an interest in phlebology, and making lipoedema / lymphoedema surgery widely available to patients. Since starting Lipoedema Surgical Solution, Dr Lekich has worked tirelessly to increase capacity and ensure patients do not have long wait lists for surgery, while their disease continues to progress. Patients do not have long wait lists at Lipoedema Surgical Solution due to the group of doctors trained as experts under this protocol. Lipoedema Surgical Solution doctors have access to a purpose built hospital that provides priority admission for lipoedema patients and a dedicated ward for overnight stays. 90% of Dr Lekich's surgeries relate to lipoedema and lymphoedema surgery.



Dr Lekich

2. How many times have you performed this procedure, and how often do you do it?

The medical team at Lipoedema Surgical Solution have performed over 1100 lipoedema/lymphoedema extraction surgeries since 2017. The surgical protocol was adopted from Dr Heck of Germany's LipoClinic, who has refined this technique over 25 years.

Dr Lekich has expanded on this protocol using his expertise as a Phlebologist, for a holistic approach ensuring management of swollen limbs. This includes addressing significant varicose veins and holes in the heart to optimise safety and minimise the risk of bleeding, clotting in the legs and throughout the body, and strokes.

The Lipoedema Surgical Solution and Miami Private Hospital protocol is not a cosmetic plastic liposuction approach rather the lipoedema / lymphoedema extraction surgery is aimed at removing the lipoedema fat with maximal safety.



Patient set up for transcranial doppler

3. What procedures do you regularly perform?

Besides regularly performing lipoedema / lymphoedema extraction surgery, our practitioners are experts in treating swollen legs and venous disease, with formal training from the Australasian College of Phlebology.

Venous disease is a common comorbidity found with lipoedema and lymphoedema and is treated by ultrasound guided endovenous laser ablation and radio frequency ablation, ultrasound guided sclerotherapy and direct vision sclerotherapy. The Vein Doctors Group infrastructure and protocols established by Dr Lekich in 2006 underpins the management of venous disease in both the inpatient/hospital and outpatient/clinic setting.



Vein Doctors Team



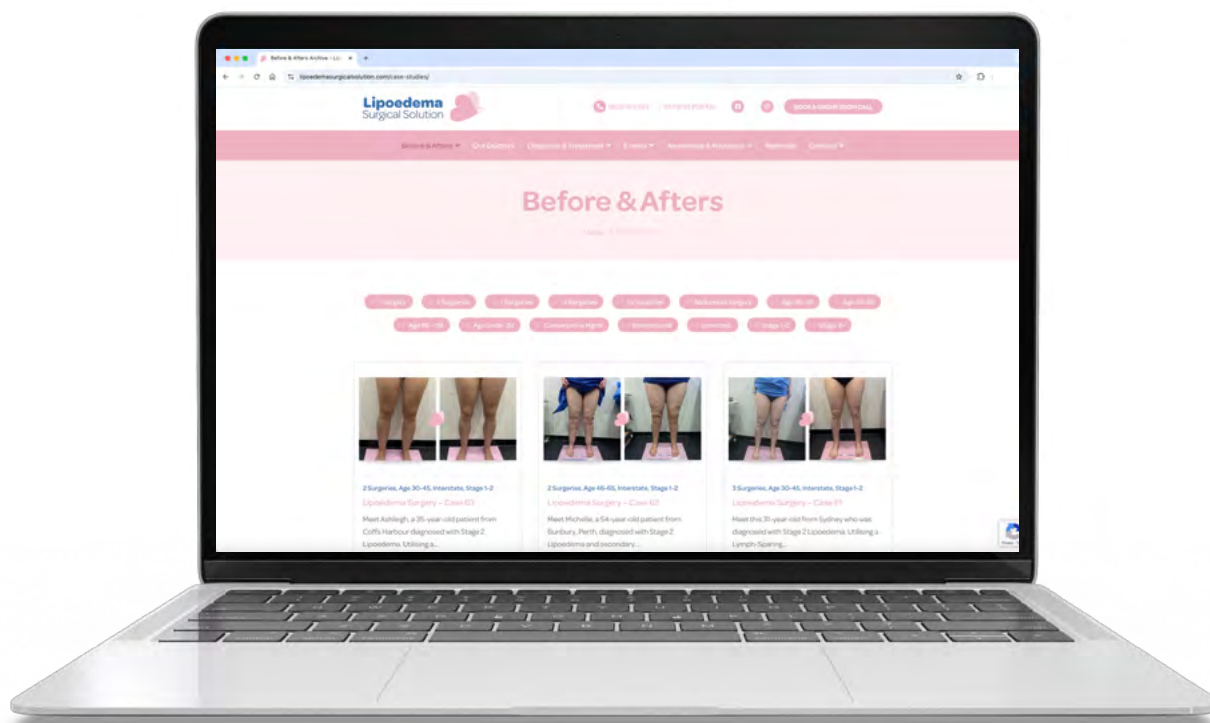
Spider veins



Varicose veins

4. Can I see photos of your work?

Photos are included in before and afters volunteered by former and current patients; they can be seen on our website www.walkwithfreedom.com.au



5. Will anyone help perform the procedures? What are their qualifications?

An assistant doctor may be present, pursuing a career in Phlebology and with a sub-specialised interest in lipoedema / lymphoedema extraction surgery under the Lipoedema Surgical Solution and Miami Private Hospital protocol.

The lipoedema / lymphoedema extraction surgery is performed at Miami Private Hospital, licensed by Queensland Health, which also means there will be a specialist FRANZCA anaesthetist and dedicated nurses in the operating theatre, as well as any surgical assistants.

Furthermore, there will be hospital administration, recovery nurses in first stage and in the dedicated overnight licensed ward. Miami Private Hospital is not a day facility, rather patients are kept for overnight monitoring so they can be safely discharged the following day. Our protocol means patients do not need to stay longer than one night.

6. Who will give my anaesthetic? What qualifications do they have?

A specialist FRANZCA anaesthetist. Furthermore, all our anaesthetists are inducted with the German protocol for anaesthetics to facilitate a quick recovery. Patients have the option to be fully-asleep or semi-awake, depending on their preferences. Patients optimise their outcomes by walking freely on the day of the surgery to promote circulation that speeds up recovery and avoids deep vein thrombosis.

7. What kind of anaesthetic will I receive?

Before the surgery patients are given the option of general anaesthetic or twilight sedation. General anaesthetic will render the patient unconscious for the entirety of the procedure, they will not feel anything. Twilight sedation is a lighter anaesthetic technique where a milder dose of sedation is applied in combination with local anaesthetic to numb the region where lipoedema tissue is being extracted. During twilight sedation the patient will be sleepy, but awake and responsive, which is in line with the German anaesthetic protocol.

In short, patients can be asleep or awake during their surgery based on their preference or where clinically necessary.

QUESTIONS ABOUT YOUR SURGERY

8. Where will the procedure be performed? Is it licenced for my procedure?

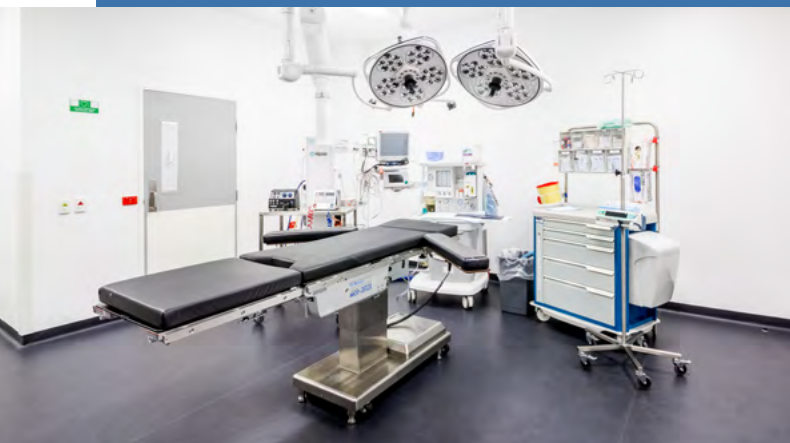
Miami Private Hospital is arguably the only purpose-built licensed hospital for lipoedema surgery in Australia and overseas. The hospital is fully licensed by Queensland Health under the national standards with benchmarks of safety achieved by compliance with audits. Management is overseen by the Medical Advisory Committee. As part of Queensland Health licensing a formal complaints and complication audit process is mandatory.



The state-of-the-art facility has 3 general anaesthetic operating theatres and a dedicated recovery ward.

Stakeholders such as Queensland Health, Medical Defence Organisations and Private Health Funds regularly visit Miami Private Hospital and recognise it as a specialised facility for venous and lipoedema surgery.

As this is a private hospital, and not just a day surgery, our patients can be kept in for routine management care for as long as is required. The fact that all patients are discharged the next morning in a stable condition, not needing crutches or wheelchairs, is a testament to the protocol and standard of surgery.



9. What are the risks of this procedure? Are there any risks unique to my health history?

As part of Queensland Health licensing, a formal complaints and complication audit process is mandatory. Rather than general discussions, actual complications of surgery are discussed with patients.

One on one discussions are undertaken with our doctors to ascertain how the surgery could impact adversely having regard to a particular individual and their health history.

Leading up to surgery there will be many touch points with the doctors, nurse and administration team. There is full engagement regarding expectations and for patients to understand the risks of surgery.

All surgeries have risks, however these risks are minimised through formal training and the Lipoedema Surgical Solution and Miami Private Hospital protocol when performing lipoedema / lymphoedema extraction surgeries. Patients are encouraged to seek second opinions and to ask their treating doctors about their personal complications performing surgery.

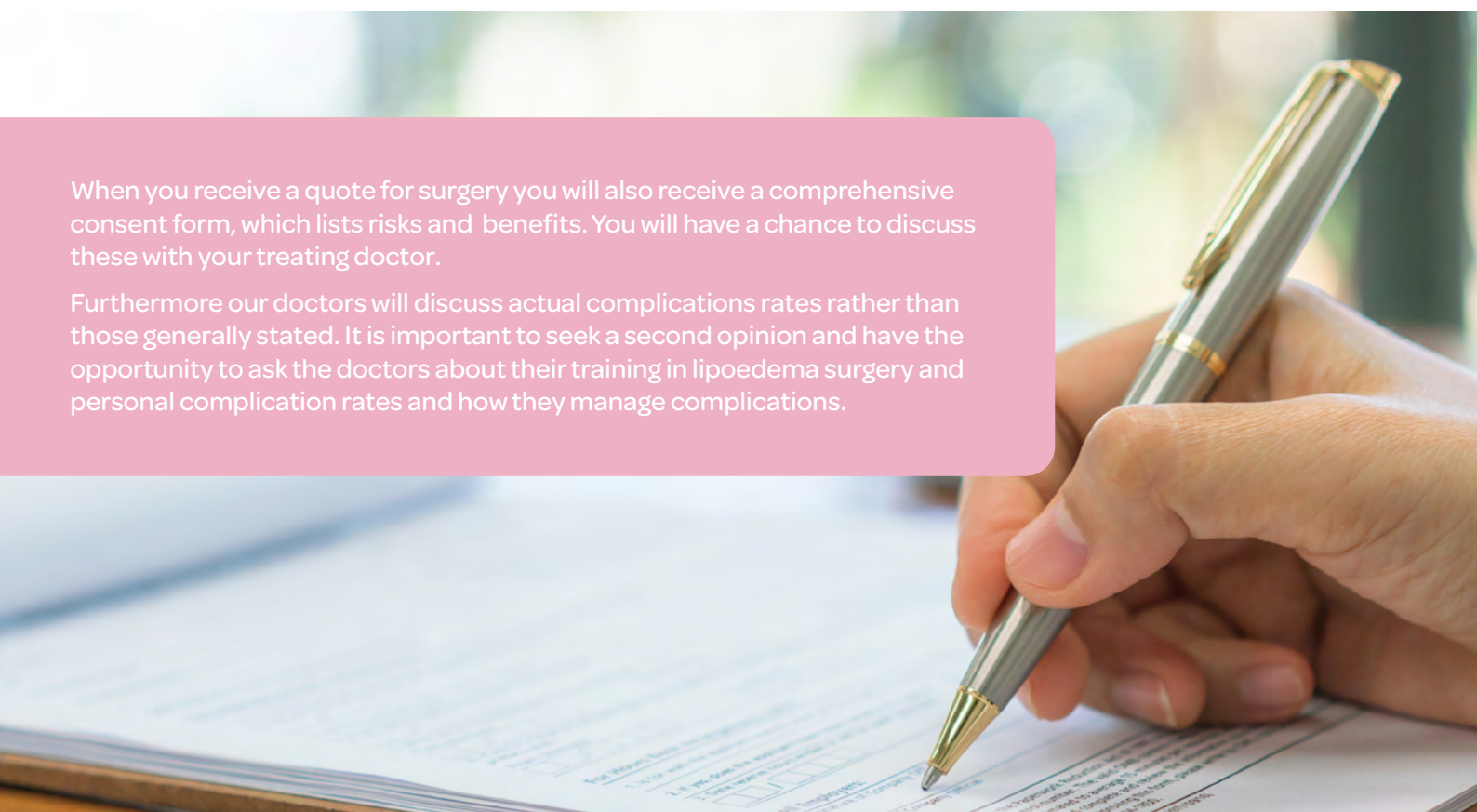
From our own clinical audit performing over 1100 lipoedema / lymphoedema extraction surgeries since November 2017, the following complications and adverse outcomes have been documented;

- Deaths - zero cases
- Cardiac arrest – One (1) case successfully resuscitated, cause intraoperative epileptic seizure
- Strokes - zero cases - holes in the heart are routinely screened and closed prior to surgery
- Loss of limb or use of limb resulting from nerve, muscle, arterial or joint injury - zero cases

- Deep vein thrombosis or pulmonary emboli (clot to the lungs) - Two (2) cases of minor DVT, which were detected early at DVT check and treated safely. This includes managing patients with genetic clotting disorders where early mobilisation immediately after surgery and ultrasound surveillance optimises recovery and reduces the risk of clotting. Zero (0) cases of pulmonary emboli
- Skin ulcers - Two (2) cases - approximately 6 cm. in length, one managed by skin grafting and one by dressings. In both cases, they occurred in advanced lipoedema stage 3/4 in the lower legs where close to 10 litres of lipoedema tissue was removed. It is important to note compression that becomes tight can cause skin damage and must be removed and replaced by lighter compression and your doctor notified if symptoms persist
- Infections - Two (2) cases requiring two (2) days of intravenous antibiotics
- Uncontrolled haemorrhage requiring surgery due to damage to arteries or veins - zero cases
- Chronic pain (Complex Regional Pain Syndrome) – zero cases
- Allergic reactions - zero cases
- Uneven lipoedema / lymphoedema extraction - this is uncommon. It is common for patients to have more lipoedema in one limb resulting in variable wrinkles and redundant skin post surgery.

When you receive a quote for surgery you will also receive a comprehensive consent form, which lists risks and benefits. You will have a chance to discuss these with your treating doctor.

Furthermore our doctors will discuss actual complications rates rather than those generally stated. It is important to seek a second opinion and have the opportunity to ask the doctors about their training in lipoedema surgery and personal complication rates and how they manage complications.



10. What are the side effects?

The following side effects can occur as a consequence of lipoedema / lymphoedema extraction surgery, most are easily managed and are temporary;

- Bruising - this is variable and temporary settling over a number of weeks
- Pigmentation of the skin secondary to bruising is unlikely to persist beyond a few months. If it was to occur, it would be rare to not fade
- Dizziness - most prominent in the first two weeks and improves as with hydration and at times requires intravenous fluids, albumin or a top-up blood transfusion. It is most likely for advanced lipoedema and when surgeries are performed on the thighs as compression is more challenging in these regions
- Anaemia - a drop of haemoglobin is expected, however this returns to normal within 4 to 5 weeks as the body replenishes blood. It is not common to need a blood transfusion. Daily reviews and regular blood testing are undertaken. Should patients require intravenous fluids, albumin or even a top up blood transfusion, patients can be routinely re-admitted to Miami Private Hospital for stabilisation to ensure they return home safely. Patients who are Jehovahs Witness and would refuse blood transfusions may require additional surgery numbers. Renuvion reduces the need for top-up infusion and transfusion, even when patients are on blood thinners
- Seromas - this is where fluid pools under the skin as lymphatics that are already overwhelmed by the lipoedema catch up in the healing process. These can be safely and quickly drained, usually in-house, using ultrasound under sterile conditions during routine check ups in the clinic
- Pain - this is controlled in the hospital in the recovery ward and by discharge the following morning most patients will find appropriate pain relief with regular walks, Panadol and Nurofen or Voltaren. Patients are discharged with stronger pain relief if required
- Constipation - due to the anaesthetic drugs and stronger pain relief medication. Simple measures to keep the bowel moving and avoiding continued use of narcotic drugs for pain relief is usually adequate, occasionally microlax enemas are required
- Persistent limb swelling post surgery. This is uncommon and if it occurs it relates to lymphoedema usually associated with advanced stage 3 or 4 lipoedema where the lymphatics have been scarred pre-surgery rather than the lipoedema recurrence. Normally with 6 to 12 months of conservative measures (MLD and flat knit compression) the swelling resolves however lighter compression may be needed for swelling that may occur at the end of the day in hot weather or on a prolonged flight. For any residual swelling, vein scans will be performed, and if patients have a tendency to secondary lymphoedema due to the severity of the pre-existing lipoedema, arrangements can be made for assessment of the lymphatic system with a view to lymphatic microsurgery
- Swelling in the arms abdomen and face after lower leg surgery - this usually resolves after 6 to 12 months as the lymphatic burden of healing settles, however, if there is lipoedema in these regions it may progress
- Progression of lipoedema in other areas that have not undergone surgery is possible due to the natural history of lipoedema progression and the burden of healing on the lymphatics. However this is unlikely to occur in areas that have had surgery as the aim of surgery is to remove the lipoedema fat so that it does not recur
- Varicose veins that develop after surgery - these may be responsible for persistent swelling. Surveillance is performed by the use of ultrasound and may need treatment after the lipoedema surgery
- Recurrence requiring a full repeat of surgery stages - one (1) case. Minor revisions can be combined during other future surgeries if needed
- Saggy / lax skin - this is variable however most likely to occur in the thighs and buttock, the abdominal region or in the upper arm where lipoedema has progressed significantly. For these patients tight "skins" would hide the redundant skin or a referral to plastic surgery for skin excision can be offered. Removal of the skin at the same time of the lipoedema surgery is not recommended as it is more likely that inadequate lipoedema tissue will be removed and there will be a higher chance of recurrence and swelling, Saggy skin is not expected in the lower legs below the knee cap even in cases where up to 10 litres of lipoedema is removed from the lower legs. A fold of skin above the knee is common where there has been significant lipoedema in the front of the thighs. Renuvion reduces laxity of skin and may obviate the need for skin excision surgery or a mini knee lift
- Continued psychological burden - This may relate to redundant skin or untreated anxiety or depression and unrealistic cosmetic expectations
- Post operative tissue fibrosis can result in small hard lumps associated with healing, postoperative bruising or seromas, these are uncommon
- Numbness is common and can last for several weeks as the skin nerves recover. Permanent sensory nerve involvement leaving permanent numbness is rare, even when using Renuvion at the same time.

11. How many people have experienced complications when you have performed this procedure and what were they?

See clinical audit (question 9) including complications.

12. Are there any alternative options to this procedure?

The alternative to lipoedema / lymphoedema extraction surgery is conservative management that is lifelong. Many women successfully reduce pain and swelling through conservative management alone including compression, manual lymphatic drainage, lipoedema friendly diet and exercise.

These conservative measures must be done as a prelude to surgery. However, even if a patient is not considering surgery it is important to ensure all elements of conservative management are understood and implemented to avoid serious implications of lipoedema in the long term. Conservative Management can help alleviate the symptoms of lipoedema, however it does not stop the disease from progressing or being painful, nor will it make the lipoedema fat go away. In aggressive cases lipoedema progresses quickly causing immobility and surgery may no longer be an option.

The aim of surgery is to remove the fat, alleviate pain and improve and restore lost mobility. Conservative management is an important and ongoing requirement during recovery, which may take 6 to 12 months. Maintaining a good, healthy, anti-inflammatory diet is important, not just for lipoedema patients, this should be maintained for life to reduce secondary obesity.

A likely outcome of surgery is to remove the lifelong commitment to wearing flat knit compression and regular MLD once all surgeries are complete. Patients who have had progressed lipoedema for many years, may have some residual swelling and damage to the lymphatics that may require intermittent use of compression and MLD.

For patients that wish to have surgery for lipoedema, we encourage you to get a second opinion. Other surgeries can involve longer incisions in an attempt to deal with skin and/or liposuction in targeted areas to sculpt or reduce some lipoedema. In our experience, this does not stop the lipoedema and it may promote accelerated growth. Many of our patients have had previous liposuction and long skin excision, this is not a barrier for re-do lipoedema / lymphoedema extraction surgery with the aim to remove the fat, as per the Lipoedema Surgical Solution and Miami Private Hospital protocol.

13. What will it cost and what do those costs cover?

As a general rule most patients need 2 – 3 surgeries depending on the progression of the disease, with the cost per surgery typically being approximately \$19,000 - \$28,000 + anaesthetist fee. This fee is comprehensive and includes all costs for surgery - including theatre fee, overnight accommodation at Miami Private Hospital, consumable costs, surgery fee, as well as most of your pre and post-operative clinical care.

14. Will it cost extra to have further treatment if something goes wrong?

The likelihood of a complication is low however it should be remembered that any surgery carries risk. In our experience performing high volume lipoedema / lymphoedema extraction surgery including all ages and comorbidities as well as stages of lipoedema surgery, few patients require extensive revision surgery, and in those cases they are combined with another stage of their surgery without any additional costs. If the patient has finished their surgical treatments and requires a revision, reduced costs for revision surgery may be provided or performed in addition to any other treatments if required in the future such as varicose veins with significantly reduced costs.

Our doctor team has a large collaborative network of colleagues across multiple specialties on the Gold Coast and if a referral is required for some reason, our team will facilitate this process and ensure you are managed in a way that is conducive to optimal recovery for lipoedema.

If patients need to, or decide to have surgical interventions or treatments with other providers this is at the patient's own cost. This scenario is very unlikely.

Patients are encouraged to have private health insurance to cover any additional care or the management of comorbidities.

Additional revision, varicose veins, and Renuvion can be performed together to reduce overall surgery fees.

15. How long do the results last? Will I need further procedures?

Should all surgeries be undertaken with the pre- and post-operative instructions followed to meet the compliance criteria, under the Lipoedema Surgical Solution and Miami Private Hospital protocol the aim of surgery is to remove the lipoedema fat to avoid any repeated surgeries. This includes patients that have children or go through menopause. If there is an area of recurrence, this can be revised. Patients are routinely reviewed at 9 to 12 months following completion of surgery to monitor veins, review the skin to determine if a referral is required for skin excision or if any revision surgery is required.

16. What will the scarring be like?

Scarring is minimal, as fine cannulas are used in a minimally invasive approach, with no long cuts to the skin. Sutures may be avoided when Renuvion is used to facilitate the escape of residual helium gas.

17. What if I'm not pleased with the result?

If patients have concerns about their recovery and results, an appointment will be organised to discuss this with our doctors. If concerns relate to redundant skin, appropriate referral will be organised to a cosmetic plastic surgeon to remove the redundant skin, after an appropriate amount of time to allow the skin to retract on its own, usually around 12 months. For any residual swelling, vein scans will be performed, and if patients have a tendency to secondary lymphoedema due to the severity of the pre-existing lipoedema, arrangements can be made for assessment of the lymphatic system with a view to lymphatic microsurgery. Continued growth necessitating the full stages of surgery to be repeated is very unlikely.



QUESTIONS ABOUT YOUR RECOVERY AND AFTERCARE

18. What care will I need and receive after the procedure and who will give it?

The first night after the surgery you will be admitted at Miami Private Hospital and monitored by our overnight nursing staff and discharged the next morning around 7am. Following discharge from the hospital, patients will need a full time, able-bodied, adult carer (over 18 years of age) for the next 2 weeks. Having a carer to pick you up on discharge from the hospital and stay with you is a hospital safety and licensing requirement and failure to have a carer will result in cancellation of your surgery.

Patients are required to stay locally on the Gold Coast, within a 10-to-15-minute drive to the hospital for the specified time after discharge, typically a minimum 7 nights after discharge, or as specified by your doctor.

Around 3 – 5 days post op, patients will return for an ultrasound appointment to check for Deep Vein Thrombosis (blood clot in a deep vein) and seromas. This appointment is also an opportunity to discuss recovery with the nursing team who will check your vitals and report back to your doctor. The team will address questions and check for seromas. More complicated patients with advanced lipoedema, significant co-morbidities and advanced age may be asked to return to the clinic for closer surveillance with the nursing team and the doctor involved as required.

Further there is daily review by phone with your doctor by texts or a call with 24 hour access with a roster of our doctors to ensure that you have any unscheduled follow up if required. Further our doctors can facilitate any medical care for you or your family if you are from out of town for conditions that do not relate to your lipoedema surgery. Dr Lekich having worked on the Gold Coast for 30 years has contacts with specialists across all fields should exceptional care be required.

Following the 2-week period of recovery, a slow healing process will begin that can take up to 12 months. A review appointment is usually required with the doctor 9 – 12 months post op, or sooner if you have specific questions or concerns.

19. What kind of discomfort or pain should I expect following the procedure and how will it be managed?

As a priority, avoid strong pain relief that causes constipation. If you don't have any contraindications, take regular paracetamol as well as non-steroidal anti-inflammatories (e.g., Nurofen or Voltaren as directed) with food to avoid indigestion/heartburn. Cold packs can also be used to help reduce pain post op and regular short walks.

20. How long will I need to be home/off work for recovery?

Patients can consider returning to work 2 to 4 weeks after surgery. However, some patients may need longer to recover, especially if their work is physical in nature or there is a requirement to drive. A timeframe specific to the patient's circumstances can be discussed with the doctor, a medical certificate can be provided for work that needs to be deferred.



21. What activities can I do during recovery time?

Activities that are highly physical in nature should be avoided, e.g running, cycling, lifting heavy objects. Instead, lighter activities should be encouraged such as regular short walks.



22. When can I start showering, exercising, driving, grocery shopping, etc.?

Showering: patients can resume showering on day 3 post op; however, compression garments must be worn. Specific instructions about showering with compression are provided and it is important to follow the instructions to avoid feeling lightheaded and to avoid fainting, falling or injuring yourself.

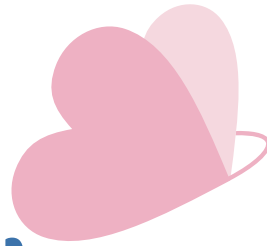
Exercise: Activities that are highly physical in nature should be avoided, e.g., running, cycling, lifting heavy objects. Instead, lighter activities should be encouraged such as walking. It is a recommended part of recovery to walk and perform light leg exercise.

Driving: Patients should consider driving 2 weeks after surgery, and only try to do so if they are feeling comfortable to operate a vehicle without being affected by pain or light-headedness. Patients should not drive if you still feel lightheaded or weak or if driving is contraindicated with your current medication.

Shopping: while patients will need to be with a carer for the following 2 weeks after surgery, activities such as shopping or exploring the Gold Coast are acceptable as long as there is care not to overexert. Be kind to yourself and allow time to recover and rest and elevate your legs following shorts walks with your carer.

23. What do I do if something goes wrong? Who should I call?

Should a patient have any questions or concerns, you can call your doctor's personal mobile phone at any time of the day or night. We provide comprehensive post-operative support by our doctor and nursing and ultrasound team.



Lipoedema

Surgical Solution

walk with freedom

For more resources on lipoedema:



Head Office: Miami Gold Coast

For other locations, please refer to our website.

 **1800 FOR LEGS | 1800 367 534**
 **walkwithfreedom.com.au**

 **walkwithfreedom**
 **walkwithfreedom**