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Breast Reduction

Procedure Aim and Information

A breast reduction helps control the symptoms caused by very large breasts.

A breast reduction often reduces breast tenderness and discomfort, back pain, shoulder grooving from bra straps, rash and redness of the skin below the breast and social embarrassment.

Women who undergo breast reduction are usually happy with the results because they are relieved of major physical discomfort and pain. It doesn't mean they love the scars on their smaller breasts though.

That's why plastic surgeons are increasingly performing Vertical Scar Only breast reductions instead of the traditional reduction resulting in an anchor or inverted T scar.

The standard breast reduction surgery results in scars on the breast that are like an upside-down T, or anchor.

There are a few, though uncommon, problems with the horizontal portion of the traditional incision. The scar at the fold of the breast often becomes thickened, even if the other scars do not. The tension where the vertical and horizontal scars meet can result in delayed or complicated healing and is often stretched.

Vertical incision breast reduction is just what it sounds like: the procedure involves an incision that circles the areola and extends down vertically below the breast like a lollipop. With this surgery, there is no long horizontal scar beneath the breast.

The vertical scar only breast reduction is a slightly faster operation, because there is less cutting and sewing and often there is no need to use drains.

The vertical scar procedure is sometimes referred to as the Lejour Technique because Professor Madelaine LeJour, a surgeon from Belgium, described it first. Since this technique was described, other surgeons have modified it with the same vertical scar result.

The vertical scar only breast reduction also achieves rounder, fuller breasts with more projection than the wide, flattened shape that results from traditional procedures.

The downside after the operation is that it takes time for the skin to smooth out and for the breast to assume its final shape. The lower part of the vertical scar remains puckered for 3 to 6 months. Sometimes if the skin does not satisfactorily flatten out you may require a small secondary scar revision operation to trim away the excess skin. The top of the breast often seems to be too high for 3 months until the breast settles into a more normal shape.

In comparison, patients who undergo traditional breast reduction procedures see their breasts assume their final shape in a month.

Like the traditional procedure, the vertical scar procedure has relatively few complications and patient satisfaction rate is close to 100%.

At the time of surgery any tissue removed may be sent to pathology for testing. Costs incurred for this service will be the responsibility of the patient.

Alternative Treatment

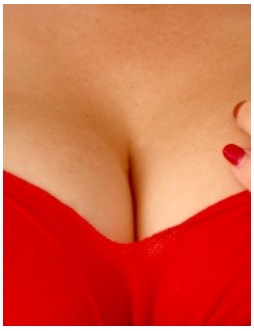
Breast reduction is an elective surgical operation and alternative treatment would consist of not undergoing the surgical procedure.

Physiotherapy to treat neck and shoulder pain complaints and wearing supportive bras may help to control symptoms.

Risks and potential complications are associated with alternative surgical forms of treatment.

Risks of Surgery

All surgery is associated with some risk



It is important that you understand that there are risks involved with any surgery. Whilst the majority of individuals undergoing surgery do not experience any complications, a minority do and there cannot be any guarantees in surgery. With every type of surgery the best possible outcome is sought. The importance of having a highly qualified surgeon and professional surgical team and facility cannot be overestimated.

Risk to benefit

The choice to undergo a surgical procedure should be based on the comparison of the risk to the potential benefit to you. Make sure that you take time to read and understand how each potential complication can impact on your life and try to make the risk to benefit comparison specifically for yourself.

Informed consent process

Before any surgery, your surgeon should explain to you the risks of the procedure and the possible complications that could happen. The informed surgical consent web site will help you to understand the risks that your surgeon has already discussed. It may also bring up other issues that will require a second surgical consultation to clarify. You should not feel that you are being an inconvenience by seeking another consultation and clarification of any questions that you may have.

You should take the opportunity to read this informed surgical consent website carefully and at your own pace. The questionnaire at the end will help to clarify your understanding. There is also opportunity to make note of specific concerns and issues that may be relevant to you so that you can discuss these concerns with your surgeon.

Impact of complications

The risks of surgery involve possible inconvenience if a complication occurs. It may result in an extension of your recovery period and in some cases may need further surgery. Infrequently, complications may have a permanent effect on your final result.

Financial risks

Financial risks are involved with any surgery. Private health insurance is strongly recommended. If you do not have private health insurance then a complication or further surgery will add to the overall cost of your surgery.

Risks related to general health

Your general health will impact on the possible risks of surgery. Many of the risks associated with surgery can be predicted. However, your general health plays a vital role to the outcome of your surgery. Age carries a greater risk with any surgery. Being overweight carries a greater surgical risk. Other medical conditions such as high blood pressure, high cholesterol, diabetes, heart and lung disease may also increase your surgical risk. Smoking greatly increases all risks and complications of surgery.

What else?

Finally other factors, that may not be obvious, can influence the outcome of your surgery and the risks are beyond anyone's control.

Risks Specific to Procedure

Impaired nipple and skin sensation

Almost all breasts after a breast reduction have decreased nipple and skin sensation to pain, touch, and light pressure for up to 6 months.

The changes to nipple and skin sensation relate to the amount of tissue removed rather than the type of technique used.

It is expected that most people will regain sensation in the skin of the breast after one year. Nipple sensation may remain decreased for up to two years. After 2 years, if sensation has not improved, the reduced sensation to one or both nipples is likely to be permanent.

In some people an increased sensation (hypersensitivity) to the nipples occurs after surgery. This settles with time.

Asymmetry

Some breast asymmetry naturally occurs in most women.

The asymmetry may be improved with breast reduction but differences in breast and nipple shape, size, or symmetry may remain after surgery.

Occasionally, additional surgery may be required to achieve breast symmetry after a breast reduction.

Undesirable shape and size

An undesirable result in terms of size and shape of the breasts should be judged no sooner than 6 months or longer after surgery.

Breast shape

The shape of the breasts after the vertical scar reduction may be conical and the breasts may appear to sit too high on the chest.
It takes about 3 to 6 months for the breasts to relax into their final shape and position. A firm fitting bra should be worn for the first month after surgery to help to shape the breasts.

Bottoming out

The lower half of the breast skin may stretch, increasing the amount of breast tissue below the nipple and causing the nipple to point upward.

This complication occurs less frequently with the vertical scar only breast reduction.

Further surgery may be required to correct this problem.

Scar puckering

The lower end of the vertical scar is often gathered and puckered.

It takes 3 to 6 months for the skin puckers to flatten out. Tape applied across the scar will help to flatten it.

In 5% of people who have had this type of breast reduction the puckers do not resolve. In such cases a small scar revision can be performed using local anaesthetic,

Nipple placement

Infrequently nipple position may be too high or too low on the breast and the nipples may appear to point inwards or outwards. In addition to uneven height, the size of the nipple may be different on each side.

The final position of the nipples may relate to individual breast anatomy.

If the nipple position is aesthetically undesirable, revisional surgery may be required.

Tear drop or pouting nipple

Occasionally the nipple-areola complex may look tear drop in shape and may pout at the 6 o'clock position or all over. Revisional surgery may be necessary after 6 months if the appearance of the nipple remains unsatisfactory.

Undesirable result

There is the possibility that you may be disappointed with the results from breast reduction surgery. Disappointments relate to scars, breast size and shape.

There are many variable conditions that may influence the long-term result of breast reduction surgery.

Further surgery may be desired to improve scarring or other problems.

Ensure that the specific risks of surgery that may be of particular concern to you are thoroughly discussed with your surgeon.

Scars

Scars are inevitable after breast reduction surgery. If you have concerns about residual scarring you should discuss these concerns with your surgeon. The final scarring is unpredictable despite careful surgery. The final appearance of the scars on the breast will depend on your skin type, your tendency to form stretched or keloid scars and your healing. Delayed wound healing for whatever reason will result in a less optimal scar than uncomplicated wound healing.

The scars around the nipple and straight down from the nipple to the fold of the breast are permanent. There is no scar in the crease or fold of the breast.

Delayed healing

Some areas of the breast skin or nipple region may not heal normally and may take a long time to heal. Delays to wound healing may relate to sutures under the skin, tension in the scar across the fold of the breast, infection, and smoking.

People who continue to smoke have a greater risk of skin loss and wound healing complications. Areas of wound breakdown can take weeks to months to heal. Regular dressings during this time will be required. Surgery in the future may be required to improve the scarring.

Fat necrosis

Some of the fat in the breast may die because of insufficient blood supply. The occurrence of this is not predictable. The incidence of fat necrosis is increased in overweight patients and those having a reduction of more than one kilogram. Fat necrosis commonly occurs in conjunction with nipple loss. The overlying skin of the breast may remain red and the chance of infection is increased. Fluid may drain from the breast or a sterile abscess or a hard mass may result.

If a lump forms related to fat necrosis it may calcify. Confusion with breast cancer is possible and it is recommended that a persistent lump be biopsied or totally removed to exclude the possibility of a breast malignancy. Removal of more breast tissue will result in uneven breast size.

Nipple and areola loss

Nipple/areola loss may occur in the first 48 hours following breast reduction or 7 to 10 days later. Late nipple loss is usually related to smoking, infection or rarely a late bleed.

Loss of the nipple/areola will require regular frequent dressings to allow healing or further surgery to remove dead tissue, (which may include underlying breast and fat). Skin grafting or nipple/areola reconstruction may be necessary.

Epithelial cysts

Small epithelial cysts and recurrent infections may on rare occassions form along the vertical suture line. Surgical excision may be required.

Late changes of shape and volume

Following breast reduction the breast shape and volume may change slightly with weight fluctuation, pregnancy, and ageing.
If changes occur, surgical modification to the breast may be necessary.

Recurrent breast growth

The recurrence of breast growth after reduction mammaplasty is uncommon.

It may occur in the younger patient whose breasts continue to grow, after a pregnancy or at the time of hormonal changes such as menopause.

Persistent pain

A breast reduction aids in improving, but may not improve complaints of musculoskeletal pain in the neck, back and shoulders. Following surgery abnormal scarring in skin and the deeper tissues of the breast may produce pain.

Uncommonly persistent pain of unknown or ambiguous cause may develop and may be difficult or impossible to correct.

Breast disease

Breast disease and breast cancer can occur independently of breast reduction surgery. When breast tissue is removed at the time of reduction, it is examined microscopically and an unsuspected malignancy or pre malignant condition may be detected. In this case, further treatment will be necessary.

It is recommended that all women perform periodic self-examination of their breasts, have mammography according to Australian Cancer Society guidelines, and seek professional advice should a breast lump be detected. Women of breast screening age or those with a family history of breast cancer should have a pre-operative mammogram.

Breast-feeding

Although some women have been able to breast-feed after breast reduction, in general this is not predictable. Studies indicate a 50% chance of successful breast-feeding after breast reduction.

If you are planning to breast feed following breast reduction, it is important that you discuss this with your surgeon prior to undergoing breast reduction surgery.

Pregnancy and breast-feeding after reduction may influence breast and skin changes and possibility of recurrent breast growth.

Mondor's disease

Mondor's disease is a self-limiting superficial thrombophlebitis (blood clot) of a surface vein of the chest wall that can occur 3 to 8 weeks after breast reduction.

This visible and palpable cord on the chest or in the arm pit will disappear spontaneously.

Additional surgery necessary

There are many conditions that may influence the long-term result of breast reduction. Secondary surgery may be necessary to perform additional tightening or repositioning of the breasts.

Should complications occur, additional surgery or other treatments may be necessary.

Other complications and risks can occur but are even less common.

The practice of medicine and surgery is not an exact science. Although good results are expected, there is no guarantee or warranty expressed or implied, on the results that may be obtained.

Risks Common to All Operations

Discomfort and pain

The severity and duration of post-operative pain varies with each individual. Mild to moderate discomfort or pain is normal after any surgery and can be expected after breast reduction. Pain will be worse when using the arms with movement such as lifting or carrying bags.

If the pain becomes severe and is not relieved by pain medication you may have a complication. In this case you should contact your surgeon.

Nausea and vomiting

Nausea and vomiting typically relate to the anaesthetic and usually settles quickly. In some cases persisting nausea and vomiting may relate to pain relieving medication or other medications like antibiotics.

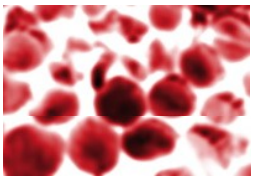
If nausea and vomiting persist you may develop dehydration. You should contact your surgeon if nausea and vomiting persist.

Swelling and bruising

Moderate swelling and bruising are normal after any surgery and can be expected after breast reduction. Intermittent swelling after breast reduction may persist for several months after surgery.

Severe swelling and bruising may indicate bleeding or possible infection. Discolouration from bruising may take several weeks to resolve.

Bleeding and haematoma



Bleeding is always possible after any operation. Some bleeding will result in bruising. Continued bleeding may result in continuous ooze from the suture line or from the drain holes sites or may result in a collection of blood under the skin.

You should notify your surgeon if bleeding after surgery persists.

Small collections of blood under the skin usually absorb spontaneously. A large collection of blood (haematoma) may produce pressure and complications to healing of the skin.

Most haematomas occur in the first 24 hours and may require aspiration or surgical drainage in an operating room and a general anaesthetic to drain the accumulated blood.

The presence of a haematoma, even if evacuated, may predispose to infection and antibiotics are often recommended.

Infrequently haemorrhage can happen 7 to14 days following breast reduction. Possible factors for late bleeding include infection, extreme physical exertion, aspirin ingestion or an unrecognised bleeding disorder.

Aspirin, anti- inflammatory tablets and mega doses of certain vitamins (vitamin E) can influence blood clotting and cause excessive bleeding.

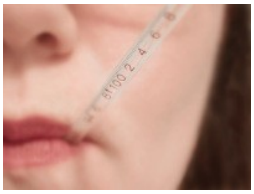
It is recommended that you do not take any aspirin, similar drugs like cartia, astrix or non-steroidal anti-inflammatory medications for ten days before surgery, as

this contributes to a greater risk of bleeding, bruising, swelling and infection. A single tablet is enough to increase the risk of bleeding.

If you take an anticoagulant like heparin or warfarin, you will need to discuss these medications with your surgeon prior to your breast reduction surgery.

Hypertension (high blood pressure) that is not under good medical control may also cause bleeding during or after surgery.

Inflammation and infection



Infection may occur after any surgery.

Most infections occur within 3 to 5 days after surgery and cause swelling, redness and tenderness in the skin around the suture lines. A surface infection may only require antibiotic ointment.

Occasionally an offensive discharge may occur from the suture line.

Deeper infections will require treatment with antibiotics. Some deep infections and development of an abscess (collection of pus) will require additional surgery under anaesthetic to drain the abscess and remove dead tissue in an operating room. Infection may cause wound breakdown or skin slough (loss). Both wound breakdown and skin slough will result in delays to healing and possible increase in scarring.

Additional surgery to deal with wound breakdown and skin slough will be required. Additional surgery may involve skin grafting. More scarring, and further surgery can be expected in the long term.

Some surgeons will prescribe prophylactic (preventative) antibiotics to be used around the time of breast reduction surgery.

Crusting along incision lines

Crusting along suture lines should be prevented with frequent and regular washing of your suture lines with antibacterial soap (sapoderm, gamophen) and application of antibiotic ointment or soft white paraffin if required. Careful drying of the suture line and the suture lines with a clean towel will be required to prevent moisture.

Numbness

Small sensory nerves to the skin surface are occasionally disturbed when the incision for a breast reduction is made, or interrupted by undermining of the skin during surgery. Numbness of the skin of the breast gradually returns - usually within 3 months as the nerve endings heal spontaneously. Return of sensation may sometimes take up to 2 years.

Itching

Itching and occasional small shooting electrical sensations within the skin frequently occur as the nerve endings heal. Ice, skin moisturisers and massages are frequently helpful. These symptoms are common during the recovery period and may persist for several weeks after surgery.

Wound separation or delayed healing

Any surgical wound, during the healing phase may separate or heal unusually slowly for a number of reasons or due to complications. This can occur as a result of inflammation, infection, wound tension, excess external pressure and decreased circulation.

Some people may experience slow healing due to unrelated medical problems.

Smokers have a greater risk of skin loss and wound healing complications.

Wound separation may also occur after suture removal. Wound separation will require frequent wound dressings and healing will be delayed. If delayed healing occurs, recovery time will be prolonged, (weeks to months), and the final outcome of surgery may be affected. More scarring can be expected. Further surgery may be required to remove any non-healed tissue and to obtain wound closure. Skin grafting may also be required to achieve wound closure.

Increased risk for smokers

Smokers have a greater chance of infection, skin slough (loss), underlying fat loss (necrosis), and poor wound healing, because of decreased skin circulation. Bleeding and haematoma formation are more common in smokers than non-smokers.

Smoking also predisposes to life threatening complications like deep vein thrombosis (DVT), pulmonary embolism, pneumonia or massive infection. It is strongly recommended that you cease smoking 4 weeks prior to and 4 weeks after your surgery.

Sensitivity or allergy to dressings and tape

Skin or localised allergies may occur to topical antiseptic solutions, suture materials, soaps, ointments, tapes or dressings used during or after surgery. Such problems are unusual and are usually mild and easily treated.

Please advise your surgeon of any skin irritation, itch, blisters or redness that may develop beneath your dressings. Allergic reactions resolve after removal of the causative agent and may require additional treatment.

Suture complications

Suture reaction or local infection may occur when subcutaneous sutures (sutures under the skin) are used. Exposed sutures will require suture removal for local healing to progress. Skin sutures may become buried under the skin during healing and subcutaneous sutures may not dissolve (stitch granuloma).

Additional surgery may be necessary to remove buried sutures or granulomas. Suture marks in the skin can occur if skin sutures or staples are used to close a surgical wound.

Skin scarring

All surgical incisions produce scarring and although scars are inevitable, some are worse than others, and the quality of the final scars is unpredictable and not entirely under the control of the surgeon. Some areas on the body scar more than other areas, and some people scar more than others.

infection or wound breakdown.

Your own history of scarring should give you some indication of what you can expect. Please ask your surgeon about scar management.

Red and discoloured scars

The appearance of your surgical scar will change during the various stages of wound healing. Some scars become more red and somewhat raised and excessive between six weeks and three months.

After six months the scar may begin to fade in their colour intensity. Scars on the breast may take up to 2 years to get as good as they will get. Scars are permanent. Scars will remain permanently visible to a lesser or greater extent, depending on the outcome.

A brown discolouration in a scar usually settles with time. White scars are permanent and there is no known satisfactory treatment. Please ask your surgeon about scar management.

Abnormal scars

Abnormal scars may occur even though careful surgical techniques are used and uncomplicated wound healing occurs after surgery. Scars may be unattractive because they are raised, thick (hypertrophic or keloid), stretched (wide), depressed, or of a different colour to the surrounding skin.

An abnormal scar may have visible suture marks. Abnormal scars may occur both within the skin and the deeper tissues.

Abnormal scars occur more commonly in some skin types, in the younger patient or if there has been a delay in healing due to infection or wound breakdown. Most scars improve with time but some may require additional treatment.

Thick scars may respond to taping, placement of silicone sheeting onto the scars, serial injection of steroid into the scars or surgical scar revision. Wide scars may require scar revision surgery to improve their appearance. Surgical scar revision may be disappointing especially in the younger patient.

Please ask your surgeon about scar management.

Asymmetry

The human body is normally asymmetrical. Despite surgical allowance for correction, the normal variation from one side of the body to the other will be reflected in the results obtained from your breast reduction surgery. Perfect symmetry may not be attainable after a breast reduction.

Injury to deeper structures

Blood vessels, nerves and muscles may be injured during breast reduction surgery. The incidence of such injuries is rare.

Post-operative fatigue and depression

It is normal for people to occasionally experience feelings of depression for a few days after surgery, especially when the early postoperative suture line, swelling and bruising is seen.

The post-operative emotional low improves with time. Physical recovery from an operation and anaesthetic is gradual.

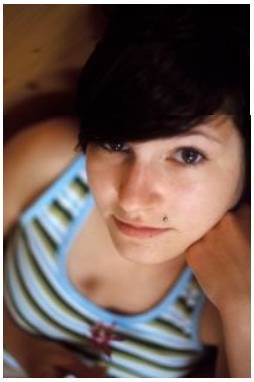
The undesirable result

The undesirable result occurs due to limitations of the human tissues and skin. On the other hand you may be disappointed with the results of surgery if they have not met your expectations. Your expectations may leave you dissatisfied with the results of your breast reduction despite having an adequate surgical result. Additional surgery may or may not improve the results of surgery.

The unfavourable result

The unfavourable result may relate to under correction (inadequate reduction), asymmetry, recurrence of the original problem or scar related problems. Additional surgery may be required to improve your results.

Need for revisional surgery



Every surgery has associated risks and complications that you need to be aware of. Should a complication occur, additional surgery or other treatment might become necessary.

Revisional procedures are less predictable and involve more risks. You must consider any revisional surgery carefully after discussion with your surgeon.

The practice of medicine and surgery is not an exact science. Although good results are expected, there is no guarantee or warranty expressed or implied, on the results that may be obtained.

If revisional surgery is required, you may incur further surgical, anaesthetic, pathology and hospital fees.

These fees may be covered if you have private health insurance, depending on your level of cover. These fees will be your responsibility; so careful financial planning is required before you embark on any form of surgery.

Private Health Insurance is strongly advised for any surgery. Please speak to your surgeon regarding the costs of treating complications.

Chronic pain

Following surgery, abnormal scarring in the skin and deeper tissues may trap nerves and produce pain.

Uncommonly, persistent or chronic pain that is of an unknown or ambiguous cause may develop.

This type of chronic pain may be difficult or impossible to correct.

Long-term effects

There are many variable conditions that may influence the long-term result of your breast reduction surgery. Subsequent alterations to your body contour may occur as the result of aging, sun exposure, weight gains or weight loss, pregnancy, illness or other circumstances not related to your surgery.

Additional surgery or other treatments in some cases may be required to maintain or improve the results of your operation.

Deep Vein Thrombosis

A deep vein thrombosis is a blood clot occurring in the deep veins of the legs/calves. It causes pain and swelling in the affected leg and is potentially life threatening.

Treatment for deep vein thrombosis is essential and involves blood-thinning agents. Complications of a deep venous thrombosis include clots spreading from the legs to the lungs or heart and may cause shortness of breath, chest pain or death.

If you are undergoing surgery, the risk of deep vein thrombosis relates to the type of surgery and the duration of the procedure.

Some people are more prone to developing deep venous thrombosis than others. These people may be of advanced age or people who have had a deep vein thrombosis in the past. Varicose veins are a risk factor as are certain medications like hormone replacement therapy and the oral contraceptive pill.

Smoking increases the risk of forming a deep vein thrombosis as well. Preventive treatment for deep vein thrombosis may be recommended and may consist of compression stockings, early ambulation or blood thinning agents.

Your risk of DVT will be automatically calculated by this web site, and shall be presented to you later.

Anaesthetic related risks

Anaesthetic complications, although uncommon, do occur and should be discussed thoroughly with your anaesthetist prior to your surgery. Allergic reactions to drugs used in anaesthesia are rare (1 in 10,000).

Systemic reactions may also occur to drugs used during surgery and prescription medicines. Allergic reactions may require additional treatment.

It is possible to get a sore throat from the tube that is used to administer anaesthesia. You may develop a painful or infected intravenous site.

Other anaesthetic complications should be discussed with the anaesthetist.

Life threatening complications

Life threatening (or fatal, in some circumstances) complications like pulmonary embolism, cardiac arrhythmia, heart attack, stroke or massive infection are rare. These complications will require additional treatment.

Pulmonary (lung) complications

Pulmonary complications are uncommon and may occur secondary to either a blood clot starting in the legs (pulmonary embolism), aspiration of stomach secretions or partial collapse of the lungs after general anaesthesia.

Before Your Operation

Organise yourself for after your surgery

- Organise how you will get to and from hospital.
- Arrange to have someone at home with you for at least 2 or 3 days after you leave hospital.
- Organise help with your shopping, laundry, housework, pets, lawns, etc.
- Get all your pre-operative tests.
- Arrange leave from work and any financial chores as required.

Your health

Surgery and anaesthesia impose stress on your body.

The state of your health will determine how well your body will cope with this stress.

It is important that you maximise your general health by exercising, not smoking and having regular checks with your GP, so that conditions such as hypertension, diabetes etc can be controlled.

Smoking

Smoking increases the risk of post-operative complications after surgery. It is recommended that you stop smoking for 4 weeks prior to your surgery and for 4 weeks after.

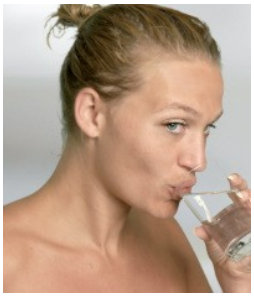
If you need help to give up smoking, speak to your G.P. who can prescribe medication to help you, speak your chemist who can advise you about nicotine replacement therapies. Or call the national QUIT LINE on 13 18 48.

Hospital

Depending on your pain tolerance and your home situation, it may be in your best interest to stay overnight in hospital. When in hospital you may have a urinary catheter, drains, a drip for fluid and pain relief.

Drain tubes and dressings are likely to be removed before you are discharged from hospital.

Fasting, fluids, food



Fasting for surgery means that you cannot eat any food, or drink any fluid, after midnight the night before your surgery. A stomach full of fluid or food will mean that your anaesthetic may be dangerous and your procedure may be delayed or cancelled.

You should have nothing solid to eat, and drink no milk-containing fluids for 6 hours prior to an operation. You may have up to 1 glass of water per hour up to 3 hours prior to surgery.

If you are in hospital a sign over your bed will read "fasting", "nil by mouth" or "NBM".

If you take medications in the morning, these should be taken as normal on the morning of your operation with a sip of water at 6 am. NB. Diabetic tablets and insulin should be withheld while you are fasting. When you brush your teeth in the morning, spit out any water rather than swallowing it.

Medications

You will be required to list all your medications by writing down the name, the dose and the day each medication is taken. If this is too difficult for you, ask your regular doctor to make a list of your current medications for you. It is important that you also bring all your medications to hospital with you.

Continue to take all your routine medications up to the time of admission to hospital EXCEPT blood thinning tablets like warfarin/coumadin. These medications must be stopped 5 days before surgery.You should discuss these medications with your surgeon.

Tablets like aspirin, astrix, plavix, iscover, cardiprin, and tablets for arthritis, rheumatism and gout, like brufen, Clinoril, feldene, indocid, orudis and voltaren must be stopped 10 days before surgery.

If you are not sure about your medications and the effect that they may have on your surgery please seek advice from your surgeon in advance of your surgery.

Other medications

Antibiotics and small doses of blood thinning agents may be prescribed prior to your surgery.

Diabetes mellitus

If you have diabetes you must tell your surgeon prior to your admission date. You must also tell the staff at the time of your admission. Special arrangement will be made for you as necessary.

Your blood sugar levels will be monitored from the time you start fasting until normal eating resumes. Do not take any diabetic tablets on the morning of your surgery.

Skin preparation

You may be required to shower at home with an anti-bacterial soap such as sapoderm or gamophen prior to your surgery. The same soap can be used after your surgery as well.

You may be required to have a shower in hospital with an antiseptic solution before your surgery. You may have to have hair on your body shaved for your procedure. You may have to have hair on your body shaved for your procedure. Do not attempt to shave yourself before coming to hospital.

A responsible person

A responsible person will be required to accompany you home after surgery. A responsible person is an adult who understands the postoperative instructions given to them and is physically and mentally able to make decisions for your welfare when appropriate.

Travel

You will need to arrange for a responsible adult to drive you after your surgery. Transport in a suitable a car desirable.

A taxi is only acceptable if someone OTHER than the taxi driver accompanies you. Public transport such as a bus is NOT acceptable.

General exercise

It is important that you maintain your fitness and you should continue your normal activities prior to your surgery. If time permits you may try to increase your fitness level gradually.

Your fitness will be of benefit to your overall recovery after surgery. Walking is an excellent way of improving fitness and is recommended.

Bowels

If you normally take medication for bowel problems you will need to bring these medications to hospital with you. It is common to develop constipation after surgery that may require treatment.

Pain relief in hospital

It is expected that you will have pain and discomfort after your surgery.

The amount and severity of pain will vary from person to person.

Narcotics (morphine, pethidine, fentanyl) are used to relieve pain. Narcotics are not addictive in the amounts required to relieve pain.

control your discomfort. This is achieved by pushing a button to administer a pre-prescribed dose of narcotic through your intravenous drip.

It is important to limit the amount of discomfort that you have, so that you are able to do your breathing and general exercises as directed by your physiotherapist.

Any initial severe pain and discomfort will be managed with intravenous medication such as morphine, pethidine or fentanyl.

Removal of tubes and drains usually results in a significant reduction of pain.

The PCA machine is usually replaced with pain relieving tablets before discharge from hospital.

Pain relief at home

Pain, aches and discomfort may still be present when you leave hospital and may continue for several weeks. It is important when you are at home to maintain control over your pain, aches and discomforts.

Drugs for pain relief vary in strength and can "generally" be related to pain severity, BUT remember also that individuals have differing responses to pain and pain relieving medications.

As a guide and for your knowledge, the range of medication by drug strength from weakest to strongest is as follows:

Mild pain relief will be required for mild pain.

Such pain relieving medication includes panadol, paracetamol, panamax and panadeine.

Moderate pain relief may require medications such as digesic, panadeine forte, tramyl, endone or oxycodone.

You need to be aware that some pain relieving medications may contribute to persisting nausea and vomiting and will contribute to constipation in the post-operative period.

Anti inflammatory drugs such as vioxx, celebrex, brufen, naprosyn and indocid will contribute to effective pain relief when taken with mild pain relieving tablets.

If you have persistent unrelieved pain you may need to be seen by a doctor to exclude another cause for the pain.

Constipation

Prevention of constipation begins on the day of surgery and continues until the bowel returns to "normal" function, which is usually once the need for pain medication ceases.

Medications for constipation such as coloxyl and senna or lactulose can be purchased from the local chemist without a prescription.

Eat fresh fruit and vegetables, take extra fibre and increase your exercise. Drink plenty of water, providing you are not on restricted fluids for any reason.

Other

It is important that you try to retain your identity as a normal person whilst you are in hospital. Make sure that you ask plenty of questions about what is happening to you. Feel free to share your concerns with the nurses, doctors and other professionals that are involved in your care.

After Your Operation

On waking

You will wake up with dressings on the breasts. A small drain tube may come out at the side of each breast. You will be propped up with pillows behind your head.

Discomfort

You can expect to have some discomfort when you wake up after breast reduction surgery. Severe pain is unusual. You should notify your surgeon if you develop increasing pain on one side only.

You will need to remember to move your legs to keep the circulation flowing and to take deep breaths to expand the lungs. You may find the change in body shape disturbing.

T.E.D. stockings

You will be fitted with TED stockings before your breast reduction surgery and you will wake from surgery with the stockings on. TED stockings help to prevent blood clots from forming in the legs. TED stockings should be worn whilst you are immobile.

Bra or garment

Your surgeon will fit you into a bra or similar garment after your dressings and drains are removed. The garment provides support for your breasts to reduce swelling, bruising and to facilitate healing. The garment should be worn day and night for 2 weeks and then during the day for another 2 weeks. After this time normal bras may be worn. Depending on your surgeon's preference you may remove the garment for a shower.

Pain relief

You will need to take painkillers as provided. It is recommended that you avoid aspirin or aspirin based products, as they will promote bruising and bleeding.

The usual medications given in the postoperative period consist of panadol, panadeine, panadeine forte, panmax, digesic, and endone. These medications may be combined with anti-inflammatory medications such as vioxx, celebrex, or brufen.

you. If the pain is not controlled with tablets or is worse on one side than the other, notify your surgeon.

Breast tenderness

Occasionally the breasts are sore and/or tender for up to 3 months following surgery. There is usually no underlying reason apart from the normal healing. Regular massage tends to ease the soreness. Eventually breast tenderness will settle.

Sleeping tablets

One or two sleeping tablets (normison, temazepam, ativan) may be taken at night, if necessary, to help with sleeping in the first few days after surgery. You may feel more comfortable sleeping with two pillows behind your head so you are slightly propped upright. This will also help reduce swelling.

Other medications

A course of prophylactic (preventative) antibiotics may also be prescribed.

Nausea and vomiting

Nausea and vomiting may be due to the anaesthetic or post-operative medication (like pain killers or antibiotics). Apart from being unpleasant, vomiting will cause pain and may disrupt the breast suture line.

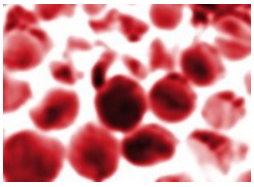
Medication to prevent nausea and vomiting may be required.

If prolonged, nausea and vomiting may be related to a complication like infection and may cause dehydration. You need to inform your surgeon of prolonged nausea and vomiting.

Bruising

Bruising of the breasts and upper abdomen after breast reduction surgery is usually maximal approximately 48 hours after surgery. Most bruises will resolve by 2 weeks. Gentle massage with a moisturising lotion (sorbolene), or arnica cream may help to dissipate bruising.

Bleeding or ooze



There may be ooze of blood from any of the suture lines or from the drain tube holes.

Any ooze should resolve within 24 to 48 hours.

Persistent or offensive ooze should be reported to your surgeon.

Swelling

Swelling can occur for 4 to 6 weeks breast reduction and sometimes, intermittent swelling may take up to 12 months to settle. Please ask your surgeon how long swelling should take to resolve. Significant swelling and pain in one breast may be due to a collection of blood (haematoma) and should be reported to your surgeon.

Swelling lasting longer than this time may be due to a complication such as fat necrosis, and should be reported to your surgeon

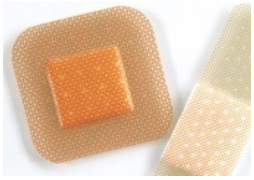
Ice packs

At home a mouldable cold pack or a small bag of frozen peas wrapped in a tea towel may help to reduce swelling, bruising, and pain. Cold packs can be applied to the breasts (for 20 minutes every 1 to 2 hours) in the first 48 hours after surgery to help minimise swelling and bruising. The cold packs should not hurt.

If cold packs are uncomfortable, don't use them as often.

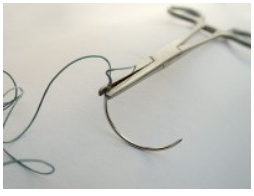
After a few days gentle daily massage with a bland moisturising cream after your shower will help to resolve bruising and any lumpiness.

Dressings and drains



Dressings and drains following a breast reduction may be removed as early as 24 to 48 hours after your surgery. If there is a lot of drainage, then the drains will remain for longer. Please ask your surgeon how long the dressings need to stay on. Steri-strips or tapes may be present on the suture line and will need to be changed regularly.

Sutures



Sutures may be beneath the skin and will absorb with time. The aim of absorbable sutures beneath the skin is to provide wound support for a longer time than skin sutures, so that scar stretch can be minimised.

Occasionally the body will want to extrude these sutures. A sore or a pimple on the suture line may indicate an underlying suture trying to break through the skin. This suture can be removed as soon as it breaks through the skin. Antibiotic ointment or betadeine may be required along with a small dressing until the area heals. Infrequently a lump forms related to a suture that has not dissolved (a stitch granuloma). This stitch granuloma may need to be excised as a local anaesthetic procedure.

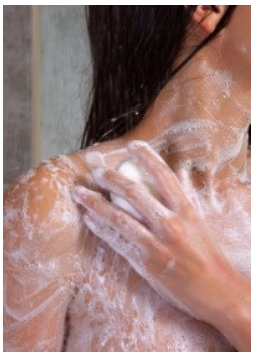
Sutures or staples may be present in the skin. These sutures or staples will require removal at some stage after your surgery. The normal time frame is anywhere between 5 days to 14 days depending on the surgery and the location on the breast. Suture removal is usually arranged with the surgeon.

Some surgeons place Steri-strips over the suture line. Steri-strips are meant to stay intact and are usually removed one week after surgery.

You may be able to shower.

Blistering from Steri-strips may occur. If this happens the Steri-strips will be removed and an alternative dressing will be applied.

Cleaning



Having a shower and getting your sutures wet may be permitted by your surgeon after the dressings (and drains) have been removed. An antibacterial soap (sapoderm, gamophen) may be recommended.

You will need to pay attention to washing the suture line and around the lower fold of the breast. Suture lines should be carefully dried with a clean towel. If your suture line has steri-strips or tape, wash over the tape and dry it.

Occasionally the suture line may become red and ooze. If this occurs tapes are usually removed and antibiotic ointment or Betadeine may be required. Your surgeon may prescribe antibiotics as well.

Some surgeons will prefer you to keep your sutures dry. Please check with your surgeon and ensure you follow your surgeon's instructions about wound care.

Travel

A breast reduction is performed under general anaesthesia and can be performed as day surgery.

If you are going home after day surgery a family member or friend must drive you because you have had an anaesthetic and someone should stay overnight with you for the same reason.

You may need help from a relative or friend at home during the first few days after your breast reduction.

If you have any questions about these matters, please speak to your surgeon.

Anaesthetic effects

The effects of an anaesthetic may still be present 24 hours after your procedure, even if you do not feel them. Your reflexes will be slower and you are at risk of injury. It is illegal to drive while under the influence of a drug (even a prescribed one) and you could be charged.

Do not make important decisions or sign legal documents for 24 hours after an anaesthetic. Take care with alcohol intake after surgery because medications and alcohol may interact with the residual anaesthetic. Discuss your normal medications with the anaesthetist.

Readmission to hospital

Rarely you may need to be re-admitted unexpectedly to hospital. The most common cause is persistent nausea and vomiting, anxiety, the need for unexpected additional pain relief or for treatment of unexpected complications of surgery such as bleeding or infection.

Activity

You will have chest soreness especially with arm movements for several days following your operation. Do not lift heavy objects or attempt vigorous activities with your arms for 2 to 4 weeks after surgery. Too much activity too soon will risk delays in healing or increase the risk of complications.

Try to avoid any straining or rushing around. You may go to the bathroom, walk around the house sit and watch TV, etc., but no matter how good you feel do not clean the house, engage in heavy manual work, go to the gym etc. for 4 weeks following your surgery. This also applies to sexual activity.

Sport

Slow walking on the flat for exercise is often therapeutic in the early post-operative period. Your body will dictate whether you are able to safely recommence your exercise program. More strenuous exercise like fast walking, running or swimming may commence after 4 to 6 weeks. More strenuous exercise like tennis or contact sports can commence after 6 to 8 weeks. As a general rule: "if it hurts, don't do it". Please ask your surgeon when you can start exercising.

Localised sore areas in the breasts are not uncommon.

Sun exposure

If fresh scars are exposed to the sun, they will tend to become darker and take longer to fade. Sunscreen on sun-exposed scars can help to fade scars.

Take extra care and precautions if you are planning to tan, as some areas of your body may be temporarily numb after surgery and you will not "feel" a sunburn developing.

Diet

Your post-operative diet should consist of fluids initially then soft food that is easy to prepare. If you have any postoperative nausea, carbonated sodas and dry crackers may settle the stomach. Small frequent meals will be more suitable and comfortable.

Vitamins

Although not proven, there is some suggestion that multivitamins prior to and after surgery may aid in wound healing. Avoid mega dosing on vitamins prior to surgery.

Smoking

wound healing; it also increases the risk of bleeding, wound infections, post-operative chest infections. Smoking also increases the risk of developing a blood clot in the legs that can travel to the lungs. It is recommended that you cease smoking at least 4 weeks prior to your surgery and for 4 weeks after.

Alcohol

Medications and alcohol may interact with the residual anaesthetic and prescription pain medicine.

Alcohol also dilates blood vessels and may increase the risk of postoperative bleeding.

It is recommended that you avoid alcohol for the first three days after surgery and restrict your alcohol intake for the first month.

Driving

It is recommended that you do not drive for a certain period of time after a breast reduction. To be able to drive safely you must have full use of your reflexes to drive, and any post-operative discomfort will inhibit your reflexes.

If pain will inhibit them, don't drive. In the interest of safety whilst driving, and legally, you must wear a seat belt across the chest. You may resume driving when you feel you are able, but it is advisable to discuss this with your surgeon or check with the road traffic authority first.

Recovery time

You must allow yourself adequate recovery time. You will have restriction to mobility for up to 2 weeks. Too much activity too soon will increase the risk of complications such as bleeding, infection and delayed healing. It would be wise to ensure you have adequate time off work. You must also allow sufficient time for your body to recover from the effects of anaesthesia and surgery. Discuss the expected time for recovery with your surgeon prior to your surgery and allow plenty of time for adequate recovery.

Healing

Everyone heals at a different rate. The ability to heal is variable and depends upon a number of factors such as your genetic background, your weight, your overall state of health and lifestyle (exercise, diet, smoking, drinking, etc.). Your attention to preparing yourself for surgery will be manifest in your post-operative recovery. Many people believe the surgeon "heals" the patient. Not one person can make another heal. Your cooperation and close attention to pre and post-operative instructions is extremely important and is in your best interest.

Following Instructions

A major factor in the course of healing is whether you follow the instructions given by your surgeon and the nurses in the surgery. Such guidelines are designed to promote the healing process and to prevent the occurrence of anything that may interfere with your recovery.

It is imperative that you recognise that you are a partner in this process and have a responsibility to follow instructions carefully. The instructions, based on broad experience, are designed to give you the best opportunity for healing without delay or surprise.

Depression

Depression is a normal reaction to surgery. The third day following your surgery may be the worst. You may be teary. It is not uncommon to experience a brief period of "let-down" or depression after any surgery. You may subconsciously have expected to look and feel better "instantly," even though you rationally understood that this would not be the case.

Day 3 post surgery may be the worst. As healing occurs, these thoughts usually disappear quickly.

If you feel depressed, understanding that this is a "natural" phase of the healing process may help you to cope with this emotional state.

Support from family and friends

Support from family and friends can be very helpful, but because they may not understand what constitutes a normal postoperative course, their comments may unintentionally create emotional turmoil for you. The staff at the surgery and your surgeon will tell you honestly how you are doing and what to expect.

Please trust in your surgeon's knowledge and experience when your progress is discussed with you.

Complications

Complications are infrequent. When complications occur, it is seldom a consequence of poor surgery or poor postoperative care. Complications are more likely to be a result of the variable healing capacity or a failure to follow post-operative instructions. You will be assisted in every way possible if a complication occurs.

Should the unexpected occur, please understand that it is important to follow the advice of your surgeon and nursing staff in order to treat it as effectively as possible. Your surgeon and the nursing staff will ensure that you have support and assistance during this difficult time.

Appointments

It is very important that you follow the schedule of appointments established for you after surgery. Appointments to see the nurse or the surgeon should be made before or immediately after discharge from hospital. The review appointment may be the next day or up to one week following surgery. If no appointment has been made, you must ensure that you contact your surgeon and make a follow up appointment. If you have any concerns don't feel that you are bothering the surgeon or the staff.

If need be, you can be seen prior to any arranged review appointment to sort out any concerns.

Revisional surgery

Occasionally the result of your surgery may not be totally perfect. If you feel that you can focus on the overall degree of improvement instead of any small lack of perfection, then you will reap the benefits of the results of your operation. If small imperfections will prevent you focusing on the degree of improvement after your surgery you probably should not have had an operation.

Your surgeon will use their expertise and experience in their surgical techniques to achieve the best results and ensure their patients receive the most advanced surgical techniques available. They keep updated by attending, national and international aesthetic conferences and seminars regularly.

The surgery performed may not necessarily relate to the methods that are sometimes promoted, or advertised in popular magazines, newspaper articles or on television. The rate of revisional surgery, even in the most skilled surgical hands, can never be zero because patient and surgeon can control only some aspects of the outcome.

Minor adjustments or additional revisions following cosmetic surgery may be necessary in up to 5% of patients.

Revisional surgery is performed after the first postoperative year (12 months after surgery) because resolution of swelling and stabilisation of the final appearance takes at least that long.

During the first year after surgery irregularities, asymmetries or poor contours may sufficiently improve without surgery, so very small imperfections following surgery should not be revised.

Revisional procedures are less predictable and involve more risks. You must consider any revisional surgery carefully after discussion with your surgeon.

If revisional surgery is required you may incur further surgical, anaesthetic, pathology and hospital fees.

These fees may be covered if you have private health insurance, depending on your level of cover.

These fees will be your responsibility and you will need careful financial planning you before you embark on any form of cosmetic surgery.

Private Health Insurance is strongly advised for any cosmetic surgery.