

FOREHEADPLASTY

Foreheadplasty or browlift can create a brighter friendlier appearance to the face by raising drooping eyebrows and eliminating frown lines from the face and forehead. The skin of the forehead is elevated and smoothed and the muscles that cause wrinkles are adjusted. This technique allows control of the crows feet adjacent to the eyes. A receding or high hairline does not necessarily preclude a patient from having this procedure. Newer techniques and modifications of the standard browlift are now available as alternatives to solving forehead problems.

It is more appropriate to describe the operation of browlift as a **foreheadplasty** because the modern operation is more elaborate than simple brow lifting. Correction of the deep furrows between the eyes, reshaping of the outer eye and alteration of the muscle activity in the forehead are available in addition to simple elevation of the brow.

The Problem

The forehead-eyebrow area is probably the most important single feature in facial expression. When the brow is contracted and depressed medially, an angry threatening look results. When the lateral brow is depressed and fullness ensues in the upper eyelid, the eyes develop a tired, sad expression.

Lateral brow drooping causing a sad or depressed appearance.



The forehead can develop horizontal lines. Between the eyebrows vertical lines can also develop as a sign of ageing.



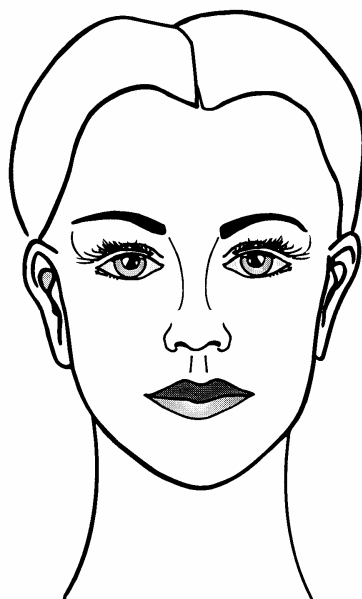
Lines developing on the forehead and in the area between the eyes due to activity of the forehead muscles cause an ageing appearance.

We live in a bright environment and every time we venture out into the sunlight we squint to help protect the eyes from the glare. This manoeuvre causes the eyebrows to contract medially. It may also cause the eyebrow to be depressed over the eye, thereby shading it from the sunlight. As time goes by, these changes can become permanent. In combination with the effects of ageing and gravity, the eyes can assume a worried, tired or angry expression.

Medial brow depression which gives an angry or worried appearance.



These various features of eyebrow descent (blepharoptosis) are often recognized by the patient as looseness and excess of the upper eyelid skin (blepharochalasis). In fact, in some cases, the looseness in the upper eyelid is the result of eyebrow descent and not simply due to excess eyelid skin. This diagnostic difference can be tested by standing in front of the mirror and elevating the brow to its ideal position immediately above the lower border of the orbital rim and comparing it to the opposite side.



Brow in ideal case has no lines on forehead and no lines between the eyes. The eyebrow is positioned just above the orbital bony rim.

It is important to recognize, that in these cases, mere removal of excess skin from the eyelid will not restore the desired youthful expression to the eyes and eyelids. Foreheadplasty is the appropriate treatment for eyebrow descent. Only when the eyebrows have been restored to the appropriate position can a decision be made about the amount of excess skin in the upper lid and the need for blepharoplasty.

Your Pre-operative Visit

Evaluation prior to surgery includes your medical history with special attention to any underlying eye problems such as dryness of the eye, visual problems, current medications and your known history of scarring. As well as examination of the status of the brow, the degree of elevation desired, the activity of the brow muscles and the status of your upper eyelids are assessed to arrive at a surgical goal which would most effectively correct your aesthetic problem.

Dr Olbourne may order a routine examination of your eyes to exclude visual and any other problems.

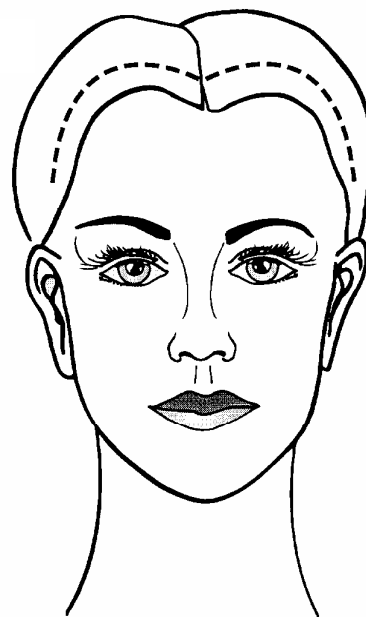
What is Done?

Foreheadplasty surgery became popular in the mid 1980's and the techniques have continually evolved since that time. There are two types of operation that are performed for correction of forehead and eyebrow problems and each has specific indications.

The classical operation involves an incision that runs across the top of the scalp behind the hairline from the top of one ear to the other. This is called a bicoronal or **open foreheadplasty**.

'Bicoronal' foreheadplasty

Incision behind the hairline from one side to the other.

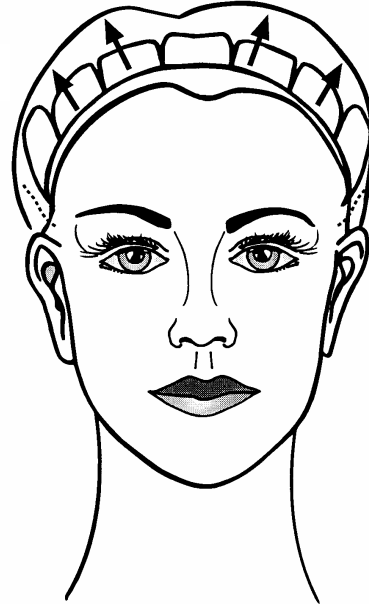


With this operation, the scalp is elevated from the underlying covering of the bone (periosteum) and mobilised down to the area above the eyebrows. The muscles that cause the lines and wrinkling previously described can then be visualised directly and can be modified in an appropriate way.

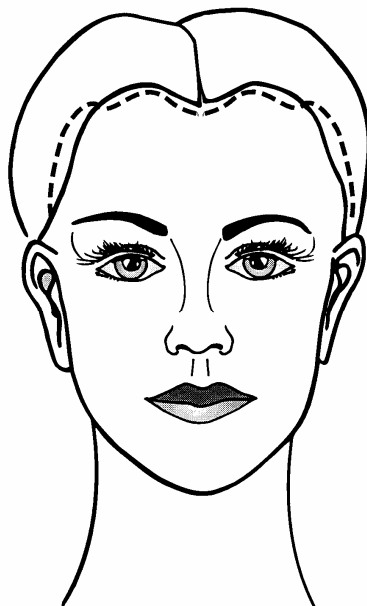
The forehead and scalp skin are then redraped over the bone and any excess scalp removed, resulting in elevation of the eyebrows.

'Bicoronal' foreheadplasty

Excess scalp skin is removed after elevation of the brow.



The scar runs inside the hairline and it is usually quite difficult to detect. Occasionally, however, it may stretch and can then be seen when the hair is parted or wet. Obviously the hairline is moved backwards a little with this procedure (usually 1-2cm) and it may not be a suitable procedure if you already have a high hairline or receding hair.



'Bicoronal' foreheadplasty

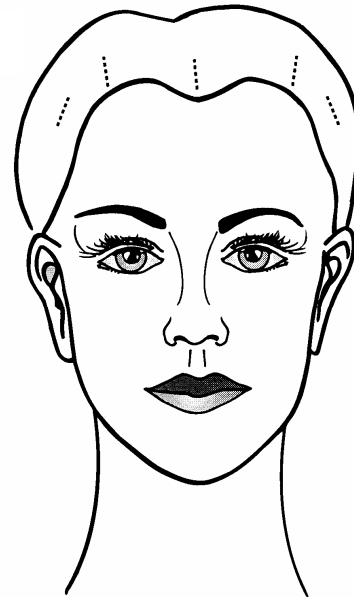
Incision along the hairline when there is a high hairline which ought not to be lifted.

Where the bicoronal foreheadplasty is the operation of choice - but a high forehead exists, the incision can sometimes be made at the hairline and when the excess skin is removed, it can be done in such a way that the hairline is in fact lowered. Where this option is considered appropriate, Dr Olbourne will discuss it with you.

A more recent development in foreheadplasty is the **endoscopic** approach. Several small incisions are placed at the junction of the forehead and hairline and the operation is performed using a small telescope and a television camera. Up to five small incisions are made and the covering of the bone (periosteum) is elevated down to the level of the eyebrow. The following diagram demonstrates this technique.

'Endoscopic' foreheadplasty

Five small incisions within the hair through which the operation is performed.



Immediately above the eyebrows the periosteum is incised so that the brow becomes fully mobile. The nerves to the scalp are visualised and protected and appropriate muscle modification is carried out. The brow can then be elevated. It is fixed in the ideal position either by sutures or minute screws inserted into the skull. These screws may be permanent or dissolvable over time. Within one to two weeks, the periosteum becomes reattached in its new higher position. The realignment of the brow-elevating muscle will produce a lift, achieving a natural, pleasing result.

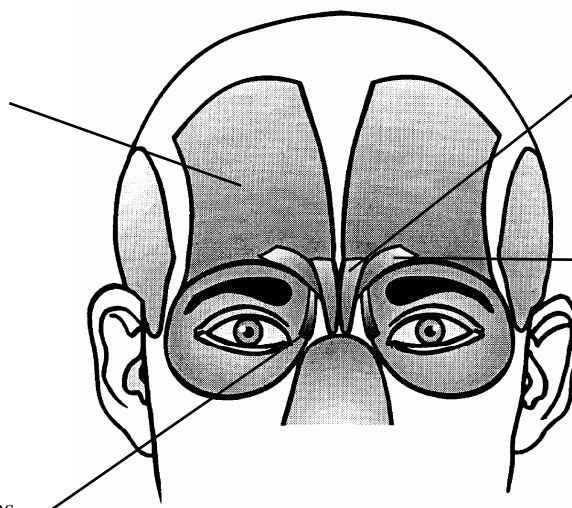
Muscles of Forehead

Frontalis muscle causes horizontal lines.

Procerus muscle causes horizontal creases across the bridge line of the nose.

Corrugator muscles cause vertical lines to develop between the eyebrows.

Depressor muscles causes medial ends of eyebrows to descend as well as vertical lines.



Advantages and Disadvantages of Bicoronal and Endoscopic Foreheadplasty

	Bicoronal	Endoscopic
Scar -Length	Long	Small
Scar -Quality	May Stretch	Barely visible
Hair loss	Infrequent	Rare
Numbness of scalp	More common	Less common
Post-op itching of forehead and scalp	Frequent - may last for many months	Infrequent
Correction achieved in:		
1. Very low brow	Excellent	Excellent
2. Deep glabellar lines	Excellent	Satisfactory
3. Horizontal lines	Excellent	Satisfactory
Elevation of hairline	Usual	Uncommon
Post-op recovery	1-2 weeks	1 week
Post-op bruising	Occurs	Uncommon
Post-operative appearance	May give "startled" look immediately after operation	Most commonly natural
Recurrence of lines, wrinkles and brow ptosis	Rare	Uncommon

When Should I Have Foreheadplasty And How Long Will It Last?

There is no specific age that is best for forehead surgery. We all age differently according to our individual genetic makeup and the environmental influences of sun exposure, skin care and smoking. In my experience, the more youthful look is maintained when foreheadplasty is performed on the younger patient. In the older patient where perhaps a more dramatic change is noted, deep furrows and wrinkles have already made their permanent mark and need to be accepted as they cannot totally be eradicated by surgery.

The best candidates for forehead surgery are women and men who are physically healthy, psychologically stable and realistic about their expectations. Most are in their mid 30's or older, but if droopy, baggy upper eyelids run in your family or you have a tendency to have deep lines between your eyebrows as a result of frowning or squinting in the sun, you may decide to have your foreheadplasty at a younger age.

Cosmetic surgery will not stop the biological clock, but it will reset it. Although there are many factors determining the overall individual result, on average you can expect six to ten years of improvement. Unfortunately, the ageing process is relentless. After a period of years you will again develop ageing forehead features with recurrence of some of the problems that you were concerned with at the initial consultation. Further improvement may be obtained by a redo of your foreheadplasty operation.

Another common misconception is that you may age faster once you have had this surgery. This is not true and although ageing continues after surgery, it is not at an increased rate.

Will Everyone Know I Have Had My Forehead Lifted?

It is usual to feel apprehensive about undergoing a surgical procedure to improve your appearance. The dilemma is, that on the one hand you want to recapture a youthful fresh look, but on the other hand you do not want people to think you have had surgery for fearing that they may regard you as being vain.

The situation is that in our society we are all vain and care about how we look. This is reflected in our hairstyles, clothes etc. It is of interest that one of the fastest growing industries is the cosmetic industry where in the United States over \$2 billion dollars a year is spent on makeup. The vast majority of people that we meet are not particularly discerning. Surprisingly though many notice even quite marked changes to your facial appearance, the usual comments that one can expect are - "You look well," or "Have you been on a holiday?"

Realistic Expectations

Foreheadplasty surgery will not stop the ageing clock and certain lifestyles, particularly those involving excessive outdoor activity, can hasten the recurrence of the lines and wrinkles as well as drooping of the lateral brow. Whilst the forehead and eyebrow position are markedly improved, not all wrinkles are removed.

The foreheadplasty operation will not correct problems in your lower eyelid. In addition, removal or redraping of excess skin in the upper eyelid may be necessary once the brow has been repositioned Dr Olbourne will discuss this problem with you. On occasions Dr Olbourne may decide to correct the eyebrows at the same time as performing foreheadplasty although for reasons indicated earlier, a decision may be made to delay the removal of the upper eyelid skin until the brow has settled. If this is necessary, it is usual for the minor reduction of upper eyelid skin to be performed under a local anaesthetic on an outpatient basis.

Ancillary Procedures

Blepharoplasty

Lower eyelid reduction may be necessary to improve the overall appearance of the eyes.

Face and Neck Lift

These operations produce fresh facial features and improve the cheeks, jawline and neck contour.

Rhinoplasty

Reshapes the nasal features.

Skin Care Programme

Improves skin quality.

Reshaping of the Bony Forehead

May help to achieve an optimum cosmetic result.

Your Surgical Experience

The foreheadplasty can be performed either as a day case, where hospital admission is not necessary, or as an inpatient. It can be performed under local anaesthesia with sedation ("twilight" technique) so that you have no memory or recall of the 1-2 hour procedure. If you prefer, the operation can be performed under general anaesthesia. Dr Olbourne and the anaesthetist will discuss which option is best for you.

1. Avoid Asprin or aspirin-containing medicine (Aspro, Disprin, Alka-Seltzer, or any medicine containing acetylsalicylic acid) for 2 weeks prior to your operation as this can produce bleeding or bruising. Panadol is safe.
2. Avoid vitamin E two weeks prior to surgery as this may also increase bleeding tendency. Vitamin B and C are safe to use.
3. Stop smoking for two weeks before surgery to avoid post-operative coughing which increases the risk of bleeding and bruising. Smoking also decreases blood supply to the healing tissues, increasing the risks of delayed and poor healing.
4. Do not drink alcohol for at least two days prior to surgery as alcohol also increases the chances of bleeding and bruising.

5. Hair colouring may be used up to the week of surgery, but must be avoided for approximately two weeks after surgery. At the end of your operation there is no hair loss. Despite there being sutures or metal clips in the scalp following any browlift procedure these are rarely seen after the hair has been washed and dried.
6. If you develop any sign of infection such as cold, flu, or pimples on your face during the week prior to surgery - please notify Dr Olbourne's office so that we can treat this effectively.
7. On the night before of the day of surgery, shampoo your hair and cleanse your face thoroughly with the provided wash. Do **not** apply any moisturiser, makeup or hair products after cleansing.
8. Bring to hospital your normal toiletries and any regular normal medication that you use. Loose night clothes are recommended. Also bring a pair of sun-glasses and a scarf to wear home. If your procedure is scheduled for the Carswell Clinic, we will advise on your special requirements.
9. If your operation is in the morning, you must have **nothing to eat or drink** from midnight. If your operation is in the afternoon, you must have **nil by mouth** from 8am on the day of surgery.

Post-operative Course

When you awake from surgery, you will usually be nursed in a semi-upright position. This is to minimise the amount of swelling. In combination with cold packs to the eyes, swelling and bruising of the eyelids following foreheadplasty can be reduced considerably. However, it is not uncommon for bruising to become evident on the second or even the third post operative day. Circular head bandages are usually applied immediately after surgery and these remain in place for up to seven days.

If you choose to have your surgery in my office theatre, then the nurse will explain this same "care of the eyes" to you and whoever may be assisting you at home. You may **not** drive yourself or be unescorted home as you will be under the influence of medication. For the same reason, you should not conduct business, sign any papers, or take any alcohol on the day of your operation.

Panadol, Panadeine or Digesic are the desired analgesics for pain relief. No Asprin or aspirin-containing drugs should be taken as this can increase your bruising and may cause bleeding into the tissues. Codeine found in Panadeine or Panadeine Forte can cause constipation, therefore lots of fluids and a high fibre diet should be taken. A suitable laxative is Nulax if needed.

After removal of the bandages, the hair will be washed. The first hairwash should be with the same antiseptic soap that was used prior to surgery. After this, normal shampoo and conditioner can be applied. A tight conforming head band or bandage will be prescribed to be used as much as possible for some time. You will need to purchase a wide, tight headband to wear as directed for as long as one month after surgery.

The foreheadplasty operation is usually not excessively painful and mild to moderate pain relieving medication is all that is necessary. If extreme pain is felt after the operation, it may be due to bleeding under the forehead skin. This should be reported to Dr Olbourne. Headache can be experienced post operatively. This may be due to stretching of the forehead nerves. If this becomes troublesome, a simple injection of local anaesthetic around the nerves will usually relieve the symptoms. This headache rarely lasts more than 24 hours.

Metal staples that are used to close the skin incisions are removed around the eighth day. The internal anchors are either permanent or dissolving and if so, need no special attention. A tight, wide headband will be needed - initially to be worn at all times - but after two weeks, only at night.

It is rare for a foreheadplasty operation to require drainage. However, if excessive bleeding is encountered during the procedure, Dr Olbourne may elect to insert a small vacuum drain which will be removed when the bandages are taken down at 24-48 hours.

It is quite common for some numbness or itchiness to be present on the forehead and scalp following surgery. This could take some weeks to months for this to settle.

Often the weeks following surgery can be difficult as you come to terms with changes around the forehead and eyes. It is a transition period when some people experience guilt and feelings of low self-esteem. Now is a good time to seek the advice of a beauty therapist and learn the art of enhancing the eyes with eye makeup-colour, shade and light-which you may never have been able to apply before. This can really boost your confidence and maintain a positive state of mind. If you would like an appointment with a trained paramedical beauty therapist, please ask our staff.

At four weeks an appointment is made for you to visit our office for a check up. A photograph is often taken to compare with your pre-op photos. At this stage you are beginning to see the positive results of your foreheadplasty and enjoying the "new you".

What Are The Dangers?

Before you make a decision to undergo plastic surgery it is important that you be informed of the major risks and side effects of the surgery you are contemplating. While all care is taken to avoid or minimize these events, it must be recognized that complications may occur despite the best medical care. For this reason and in order that you may be properly informed prior to making your decision about surgery, it is important that you read and understand the relevant important risks.

Below is a list of side effects which accompany eyelid and forehead surgery on a relatively common basis. Dr Olbourne has set forth complications, which although rare and unexpected, may occur despite a surgeon's best efforts. Please read this list carefully and understand that thousands of successful cosmetic procedures have been performed. The occasional occurrence of these side effects may be a part of what is considered a successful cosmetic operation.

Likewise, although limited statistically, the complications listed herein do at times occur despite optimal surgical care and patient cooperation.

The following pre-existing medical conditions make foreheadplasty slightly more risky. These include:

- lack of sufficient tears (the dry-eye syndrome),
- high blood pressure or other circulatory disorders,
- clotting deficiencies in the blood, and
- a past history of eye conditions such as glaucoma or detached retina.

If you have any of the above, please bring it to Dr Olbourne's attention prior to surgery. If necessary a further opinion can be obtained and appropriate therapy instituted.

Possible Side Effects

Swelling

This is usually worst in the first 72 hours following surgery and gradually settles over the following weeks. Some residual swelling may be present for up to six weeks and may be asymmetric depending on such factors as your favourite side of sleeping. In such cases, medical therapies such as ultrasound or lymphatic massage may be helpful. Swelling rarely persists in the longer term. It is usually intermittent and associated with your sleeping position.

Bruising

This is maximal in the first 72 hours and initially may not even be apparent. However, as the forehead skin is relatively thick in comparison to eyelid skin, the bruising may drain downwards into the upper eyelids. This resolves over the ensuing ten days. If troublesome or persistent it can be camouflaged with makeup or dark glasses. Our staff can help with such makeup advice.

Post-Operative Pain

As indicated earlier this is usually not severe. However it can be associated with headache. Oral medications are usually enough to control this pain, but if excessive, Dr Olbourne should be notified early as this may indicate a complication such as bleeding under the scalp flap.

Scalp Numbness

Loss of sensation in the anterior scalp and behind the bicoronal incision is common after a foreheadplasty procedure. While sensation usually returns over a period of months, occasionally a partial deficit of feeling in the scalp or forehead may be permanent. Numbness in the middle of the forehead is usually mild even when the surgeon has resected the frowning muscles between the eyebrows.

Paraesthesia and Itching

For up to several months after surgery or occasionally even permanently, itching and abnormal sensations (paraesthesia) are common in the scalp and forehead. Persistent itching may cause problems in some patients who do not restrain themselves from scratching the scalp. Scratching can produce ulceration in the hair and hair loss. If the itching becomes severe, medication to reduce this may be necessary for a period of time.

Scarring

Scars will result whenever an incision is made in the skin. This phenomenon is camouflaged by locating the bicoronal incision in the hairline. The great advantage of the endoscopic foreheadplasty is that the multiple incisions for surgical access are small, well orientated, heal rapidly and are barely visible. When the skin is incised, the healing process will pass through a red, itchy and sometimes lumpy stage to become pale and soft. Incision lines may be visible in the hair, particularly when the hair is parted, although this is rarely a problem. In some cases the scar in the hair stretches and is more visible. In these cases revisional surgery will usually correct the problem.

Possible Complications

Infection

This is exceedingly uncommon, but can occur following a foreheadplasty operation. If he is concerned, Dr Olbourne will prescribe appropriate antibiotics and monitor your progress.

Frontal Hairline Alteration

Conventional foreheadlift requires an incision which runs across the top of the skull. This incision is usually placed within the hairline - about one to two inches back. The resultant scar is hidden, but the hairline is elevated as the forehead is stretched. Where the patient has a high hairline preoperatively - an alternate incision can be made precisely on the hairline.

This particular incision does not change the hairline (it may even be arranged to lower the hairline). But the scar may be obvious unless the hairstyle is designed to hide it. With endoscopic surgery - the incisions are placed in the hairline. However they are short and almost never leave visible scars. The mechanics of the operation usually result in significantly less alteration of the location of the hairline.

Hair Loss

Temporary or permanent hair loss can occur after a foreheadplasty. Some of the hair follicles in the flap may enter a resting phase presumably due to tension or suturing. This can produce temporary thinning of the hair. However, over the next two to three months in most cases the hair will return. Occasionally small areas of permanent hair loss can occur, particularly around the incision lines. In these cases a small corrective procedure may be useful in removing the non-hair bearing scalp.

Forehead Lag

The nerves to the elevator muscles of the forehead are potentially at risk during forehead surgery. These fine nerves may be stretched as the forehead is elevated or moved. If this occurs, temporary paralysis of the forehead occurs. Although this removes the forehead wrinkles, it also removes animation of the forehead. This temporary paralysis (called “neuropraxia”) will recover in days to weeks.

Occasionally these filamentous nerve fibres may be severely damaged and paralysis of the forehead can be permanent. Although quite uncommon, this is a surgical complication which must be contemplated by any patient undergoing forehead surgery.

Skin Necrosis

Small areas of skin death have been reported following foreheadplasty surgery. If this complication were to occur, the area is usually within the hair bearing scalp and minor corrective surgery will usually eradicate the problem.

Lagophthalmus

This term describes an inability to fully close the eyes. This problem has been reported following brow lifting, but is almost invariably confined to patients who have had their upper eyelid skin removed in a blepharoplasty prior to seeking advice about foreheadplasty. It is important to advise Dr Olbourne if you have had previous eyelid surgery, particularly where upper eyelid skin has been removed. The potential problem resulting from lagophthalmus is risk to the eye from corneal exposure, particularly whilst you sleep. By forewarning Dr Olbourne of previous eyelid surgery, the problem can be dealt with in a variety of ways.

Changes of Facial Expression

Occasionally after elevation of the eyebrows and particularly where excessive swelling has occurred, the patient’s facial expression may change. As the swelling settles, the skin of the forehead gradually assumes a natural position. However it is very occasionally necessary to perform small adjustments three to six months after the original operation to achieve an optimal result.

Asymmetry

Most faces are asymmetrical to a lesser or greater extent. Where asymmetry is identified adjustments can be attempted at the time of operation. Correction of these asymmetries may not be completely achievable. Rather than considering this as a complication, minor asymmetries should be considered as a variant of a normal interesting face.



CALL DR OLBOURNE IF YOU EXPERIENCE THE FOLLOWING:

- ☞ Excessive pain or bleeding
- ☞ Fever during the first 24 hours or especially during the first 7 days
- ☞ Abnormal swelling of the forehead

How Much Will The Procedure Cost?

The costs of this surgery relate to:

- a) surgeon and assistant surgeon
- b) anaesthetist
- c) hospital
- d) ancillary charge (pharmacy, etc)

Dr Olbourne can tell you his fee and give you some indication of the costs of the other people involved in your care.

You must appreciate that the ultimate cost to you will depend on where you choose to go for your procedure and what rebates you will receive from your medical fund and Medicare. This in turn depends on who you may be insured with and what level of insurance you have chosen. Please advise Dr Olbourne if your insurance has a front end deductible cost or "excess". With all the relevant information the doctor's office should be able to give you a very close approximation of what your final costs might be.

Private insurance including Medicare may pay part of the cost of the operation. If so, they would also contribute to the anaesthetic and hospital costs.

It is always preferable to arrange all your finance prior to surgery to avoid unnecessary stress afterwards which will detract from your enjoyment of having achieved your goal.

Further Information

For further information on this or any other cosmetic procedure, feel free to contact our office. Our staff are dedicated to assisting you and will do all they can to make your surgical experience as comfortable as possible.

You can also assist us by advising us of any aspect of your experience that has not been adequately covered in this brochure. We are always seeking to improve the information we give to patients. Your input will help us achieve that goal.

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