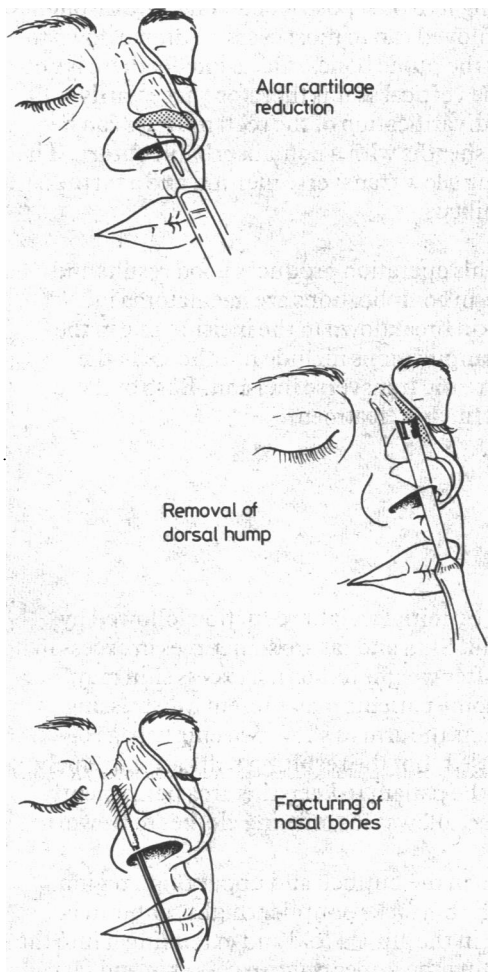
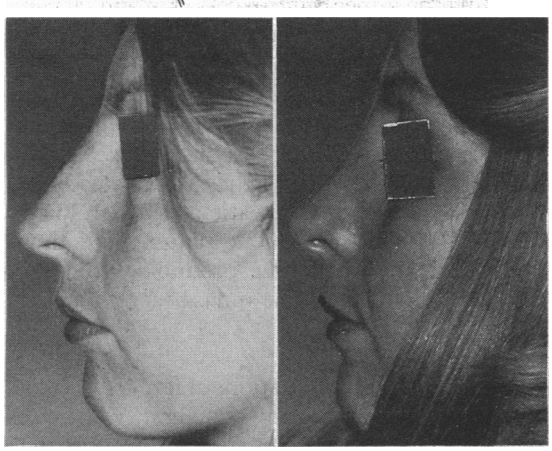
Plastic and Reconstructive Surgery

D M DAVIES

COSMETIC SURGERY II

Rhinoplasty





Before and after rhinoplasty.

Rhinoplasty is the most popular of all cosmetic surgical procedures. The nose may be considered to require an overall reduction in size, or surgery may be sought to correct the shape of a normal sized nose—for example, if there is a large dorsal hump or the nose may have been damaged and either be crooked or have a depressed dorsal profile, possibly also with nasal airway obstruction. The surgeon must understand exactly what the patient is requesting before undertaking surgery, and preoperative photography may well help in this instance. The other important point to explain to the patient is that, although the surgeon's skill is important in the final outcome, so also is the way in which the patient's tissues heal. This is particularly important in the way a nose tip finally takes up its shape.

Standard rhinoplasty in this country is done under general anaesthesia. A bloodless surgical field is provided by either hypotensive anaesthesia or the injection of a weak adrenaline solution into the tissues of the nose. All incisions are made endonasally (inside the nose) except in very large noses that are being made considerably smaller, in which case the lateral alar bases are excised leaving very fine scars at the junction of the nose with the nasolabial fold.

The basic procedures are:

(1) The dome of the alar cartilages is excised to make the tip of the nose smaller.

(2) A deviated septum is either resected or repositioned.

(3) The caudal end of the septum may be shortened.

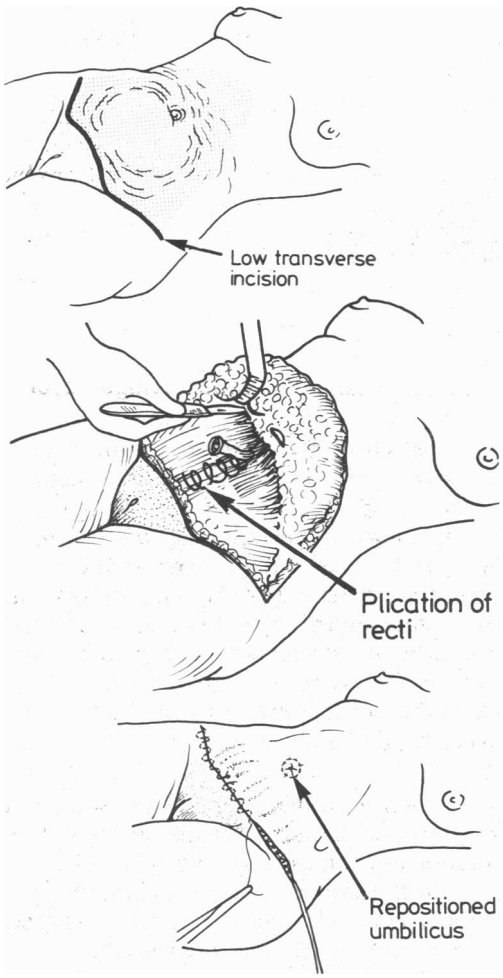
(4) Surgery is then directed to the dorsum of the nose, which is partly cartilage, partly bone. It is usually reduced in height, but in some cases augmentation is required. A bone graft can be taken from the iliac crest or rib, cartilage from the rib or ear. Alternatively, silastic can be inserted into a pocket lying above the nasal septum to improve the dorsal profile.

(5) The nose is usually then made thinner by fracturing the nasal bones as they arise from the maxilla, and their position is held with a plaster of Paris splint.

The lining of the nose is carefully repaired and postoperative haemorrhage controlled with nasal packs, which are removed within the first 24 hours. The operation is not painful, but patients feel uncomfortable until the nasal packs are removed. The necessary orbital ecchymosis may be quite severe in the first 48 hours but completely resolves within two weeks, at which time the plaster of Paris is removed. The patient is usually in hospital for two to three days.

Despite careful surgery up to 20% of rhinoplasties may require a small secondary procedure, which can usually be done under local anaesthesia. A well performed rhinoplasty producing the desired result for the patient is one of the most satisfying procedures for a plastic surgeon to perform as it may produce changes in a patient's appearance and psyche for which he or she is extremely grateful.

Reduction of the abdomen

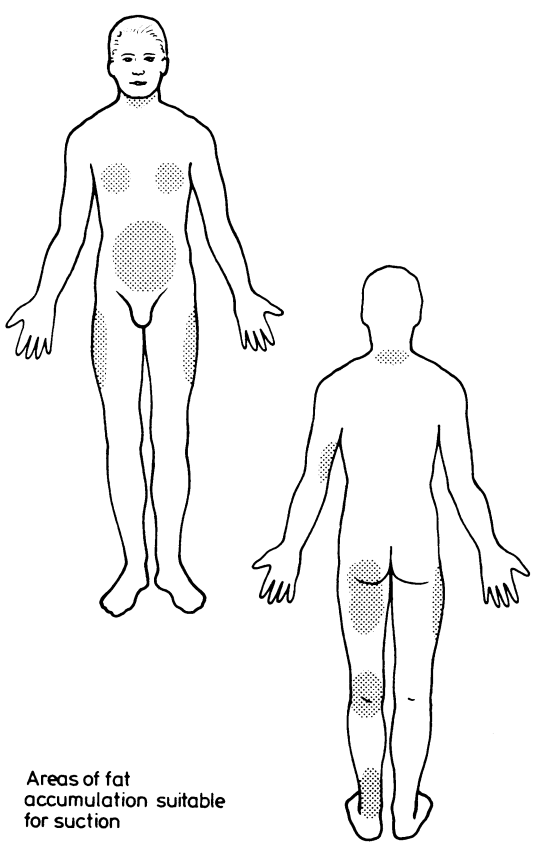


It is not known why some women who have multiple pregnancies can retain almost the same contour to their abdomen as they had in their younger days when others after a single pregnancy develop excess folds of skin that becomes thin and deeply marked with striae. At the same time excess adipose tissue may accumulate and the recti muscles become divarificated. Once such patients have undertaken to lose weight the situation can be greatly improved by excising the excess abdominal skin.

In the standard operation, performed under general anaesthesia, a low transverse incision is made in the area covered by the bikini bottom. Skin of the abdomen is mobilised virtually up to the costal margin and the umbilicus is circumcised, allowing it to be repositioned. The hole through which the umbilicus has been removed can in most cases be drawn down to the lower wound edge just above the pubic bones. Occasionally there is not enough excess skin, and a midline vertical scar is therefore necessarily produced. At the same time any divarification of the recti muscles can be corrected by plicating the rectus sheaths with a non-absorbable suture. The excess skin is then excised, leaving a low transverse incision and a further circular incision around the umbilicus.

In correctly selected patients this operation produces good results and gratified patients. Major short term complications are haematoma in roughly 2% of cases and minor skin breakdown in the incision line in the suprapubic area. Longer term complications include numbness in the midline and a rim of oedema above the transverse incision. Both of these symptoms usually settle without further treatment.

Body contouring operations

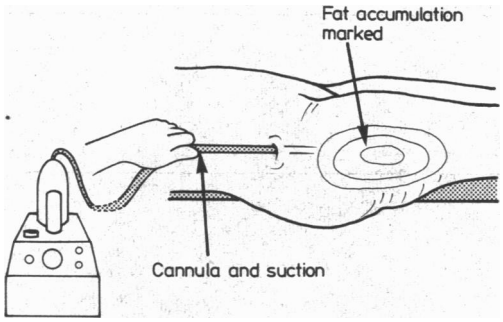


Obese patients are best served by initial weight reduction followed by surgical excision of the excess skin. Skin and fat are sometimes in excess in the upper arms and the thighs. After weight reduction excess skin may drape off the upper arms and in some patients may present a distressing deformity when the patient abducts the arm to show two empty bags of skin. This excess skin can be excised, but the resulting scars are extremely unattractive and usually require the patient to keep this area permanently covered. The procedure, however, allows closer fitting clothes to be worn.

A similar condition can happen in the buttock and upper thigh region. Occasionally a procedure to lift the buttocks or upper thighs, or both, is indicated. By making an incision in the gluteal fold and extending it into the inguinal region and by undermining the upper thigh excess skin and fat can be excised. The scars are usually easily hidden, but again careful selection of patients is required.

Certain surgeons think that there are two types of subcutaneous fat. Firstly, there is the type that disappears with dieting, leaving the excess of skin as previously described. Secondly, there is a type that occurs mostly below the waist and is not influenced by dieting. The patient will therefore be left with an accumulation of fat in certain areas that no amount of dieting can remove. Such areas are over the greater trochanter, producing a sort of jodhpur effect; this may be removed by surgery alone and is best performed by a new procedure of fat suction.

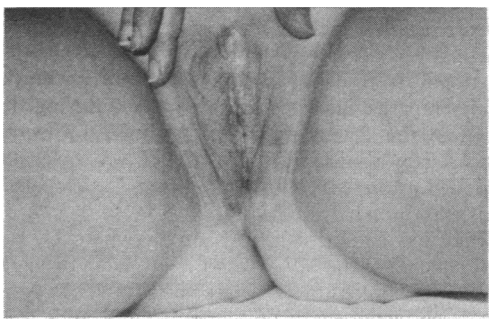
This procedure is indicated for localised accumulations of fat, particularly in younger patients. It is usually done under general anaesthesia. The area of fat accumulation is marked out carefully before the operation, which may be done as a dry procedure. Some practitioners inject



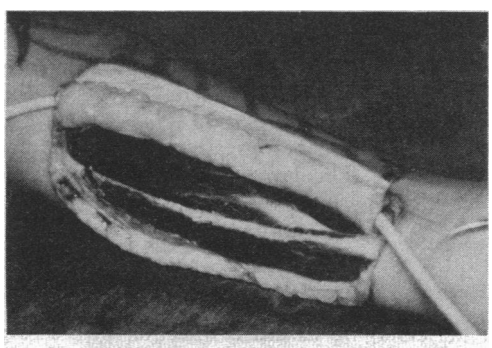
a weak hypotonic saline solution to try to rupture the fat cell membranes, but this is not universal. A long metal cannula is introduced through a small incision at a distance from the fat accumulation, and a strong negative pressure is provided by a suitable machine. Postoperatively, careful strapping of the treated area is required to provide topical pressure, and the patient can usually be discharged from hospital the next day.

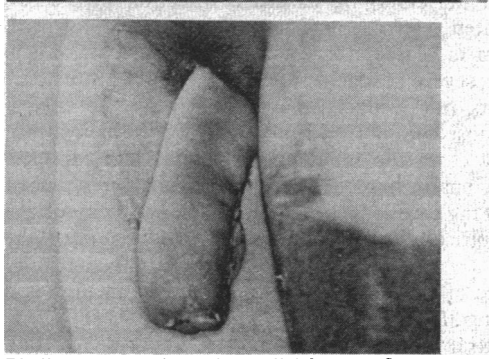
Complications include repeated seroma production, uneven removal of fat, and a bevel at the edge of the treated area. This technique can be applied to other areas of fat accumulation in the lower abdomen, submentally in the neck, and to localised lipomas over the rest of the body.

Reassignment of gender



Male to female conversion.





Phallus construction using radial forearm flap.

There are an estimated 10 000 transsexuals in the United Kingdom, of whom about 1000 have received surgery of one form or another. Team management is required for this and is usually based around the psychiatrist to whom the patients are referred in the first instance. Initially, the patient has to live in the role of the new gender for at least two years, totally for the final year. This period may be reinforced with hormone treatment. At the same time, patients, particularly men becoming women, are instructed in the attitudes and mannerisms of the new sex so that they can fill the role more successfully.

It remains unproved whether psychotherapy, psychotrophic drugs, or surgery is the best long term treatment for this distressing group of patients. Any surgery that may be advocated by the psychiatrist is undertaken by a urologist or plastic surgeon. Most surgery is undertaken on the male to female gender reassignment, the most radical procedure being amputation of the genitals but using the penile skin to line a newly created vagina. Other surgical procedures may include breast augmentation and facial surgery and of course electrolysis to try to irradicate hair from the beard.

Female to male reassignment, apart from hysterectomy, bilateral mastectomy, and oophorectomy, is far more difficult. Until recently the only way to create any sort of penis was to use a tube pedicle or a local myocutaneous flap, requiring a multiple stage procedure with quite extensive local scarring to produce an organ which was in many instances unsatisfactory, usually because it was too large. More recently, radial forearm flaps have been adapted to allow a one or two stage construction of a phallus with a urethra. This is intended to provide the patient with an organ that allows him to stand with his colleagues and pass water in a public urinal and in no way is meant for sexual intercourse, in which case it would require reinforcement with a silastic rod.

This sort of surgery meets with a fair amount of scepticism from colleagues in general medicine and tends to be viewed completely unsympathetically. In carefully selected cases, however, who have been managed with the team approach, a well adjusted patient may be produced who can be reintegrated into society.

Mr D M Davies, FRCS, is consultant plastic surgeon, West London Plastic Surgery Centre, West Middlesex University Hospital, Isleworth, and consultant plastic surgeon and honorary senior lecturer, Royal Postgraduate Medical School, Hammersmith Hospital, London W12 0HS.