

BREAST ENLARGEMENT (AUGMENTATION)

It is important for you to read all of this advice document before you decide whether to have an operation to enlarge your breasts. Although you may know someone who has had the operation and who is probably very happy with the result, and although they may have told you what to expect, it is now a legal requirement that a surgeon informs you of everything that is involved and especially the possible risks. It is much better if you can read this document before you see your surgeon so that you can ask extra questions based on this new knowledge. The surgeon will ask you a lot of questions about your health and past medical history and will need to assess what kind of breast operation is appropriate for you.

It is important for you to see what implants look like and to feel them so that you have a better understanding of what is involved. I think it is essential for you to look at photographs of before and after views of this type of surgery to help you judge what size you want to be. It also helps you to appreciate how much variety there is in the shape of women's breasts both before and after this type of enlargement surgery. The type of shape that you will have after surgery will be very much influenced by the size and shape and maturity of your breasts, and whether or not you have ever been pregnant.

METHODS OF BREAST ENLARGEMENT

Before the invention of silicone implants in the late 1960s, attempts were made to enlarge people's breasts by transferring lumps of fat from other parts of the body to the breasts. This was a dismal failure because the fat always died and there were many complications.

Nowadays with advances in liposuction it may be possible to enlarge the breasts by one cup size by injection of the person's fat obtained by liposuction from another part of the body. There obviously has to be a good supply of fat and so this won't be worth thinking about in a person who is very thin. Several separate operations may be required to achieve a worthwhile enlargement because one can't inject very much fat in any one part of the breast at any one session and so worthwhile enlargement by lipo-injection usually takes three separate operations over a period of a year or more. Ultimately it may cost as much as having a standard breast enlargement with implants.

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It is not possible to increase the size of your bust by exercise. Exercising the pectoral muscles, which lie immediately behind the breast, may make them slightly bigger but certainly won't make the breasts any larger. It might in fact do the opposite because if a person becomes fanatically fit they will almost certainly lose some weight and the breasts may well shrink slightly.

I would never criticise someone for taking exercise but unfortunately it won't improve your figure at chest level, although it may reduce your waist-line! The only way that we know of which will increase your bust size is by pregnancy or putting something into the breast by surgery. Nowadays when we carry out breast reconstruction it is possible to transfer fat from one part of the body to the breast area safely. This is because we now have means of doing this and keeping the supply of blood to the fat which we are transferring. These techniques, however, are complicated and involve damage to the abdominal wall. They are usually reserved only for those people who have lost their breasts as a result of cancer. The type of operation which transfers the lower abdominal skin to the breasts can take anything up to 5 or 6 hours. I do not know of anybody even in the United States who is using it as a means of cosmetic breast enlargement.

Therefore, the only quick way of making breasts bigger is to insert something behind the breasts or behind the muscle behind the breasts which causes the least amount of trouble. People have been looking for a satisfactory material for the last 50 years and no-one has found anything better than silicone. All implants that are used nowadays have an outer shell of silicone. It is a common misconception to believe that you can have an implant which doesn't contain silicone. **ALL IMPLANTS HAVE A SHELL OF SILICONE – WHAT THEY MAY CONTAIN CAN VARY ENORMOUSLY.**

WHAT BREASTS CONSIST OF

Breasts consist of a combination of true breast tissue inter-mixed with fat. Breast tissue is a remarkable type of human flesh which feels soft but is incredibly strong and it can't be cut easily with a pair of scissors because it is so tough. Breast tissue increases a great deal in most people when they are pregnant. This breast tissue then shrinks again when the person has stopped breast feeding. The amount of breast tissue doesn't seem to change very much with changes in weight. Weight changes, however, do affect the amount of fat in the breast. If you put on a great deal of weight the fat cells enlarge inside the breast and they may increase in number as well.

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True breast tissue being much stronger than fat tissue maintains the shape of the breast quite well up until pregnancy but once the breast tissue itself has increased in size and then shrunk again it becomes much floppier and so the breasts tend to lose their shape after pregnancy. Women who never becomes pregnant tend to keep a better shape in their breasts than those who do become pregnant. Unfortunately, inserting breast implants won't restore young, firm, high breasts, they will merely increase the size of the breasts but they will still stay slightly droopy.

SILICONE IMPLANTS

All implants are made out of silicone elastomer. This is what will touch the underside of your breast or underside of the muscle behind the breast (pectoral muscle). This silicone elastomer is a flexible membrane rather like thick cling-film. The implant can contain many different types of chemical to act as a filler. The simplest filler is saline or salt water. A new type of filler is a mixture of starch and water and is called Hydrogel. Some other types of filler are polyvinyl pyrrolidone, Soya bean extract, silicone gel or semi-solid silicone. Manufacturers keep experimenting with new materials in the hope of finding something which is better.

You may hear that one type of implant is "better or safer" than another. You must, however, be aware that the outside of the implant, regardless of what it contains, is going to be silicone in one form or another. If you don't want to have silicone in your body you won't be able to have breast enlargement.

There has been a tremendous amount of publicity about whether silicone implants are safe. Unfortunately, when silicone implants were first being used the western governments did not enforce any system of monitoring of their use or their consequences and rigid scientific studies of the safety of silicone implants came in relatively late after the first introduction of silicone. The American authorities decided to ban the use of silicone implants at one stage until there was good scientific evidence to show that they were not doing serious harm. There had been a lot of speculation that silicone gel containing implants were somehow riskier than the implants which contained only saline. American surgeons were not allowed to use anything other than saline implants for several years after the initial ban by the Federal Drug Administration.

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The evidence which has accumulated, however, from studies of very large numbers of people who have had implants when compared with equivalent people who have not had implants, show that there is no evidence to support the idea that silicone implants are doing any serious harm.

RUPTURE OF IMPLANTS

When we were using silicone implants for the first time we had no idea whether they were going to last for the life-time of the patient but we assumed that they would, although manufacturers never gave any such guarantee. In the majority of cases silicone gel containing implants have lasted a very long time, many as long as 25 years, and in a lot of cases not caused any problem at all.

However, we now realise that the shell of the silicone implant can disintegrate eventually so that the implants can be said to be leaking. Many manufacturers now give a guarantee that their implants will not disintegrate or leak for 10 years. Some are giving a life-time guarantee. This indicates that manufacturers have a much greater confidence in the durability of their implants than in the past. Implants which were being manufactured in the 1970s and 1980s had quite a high risk of spontaneous breakdown which resulted in silicone escaping into the breast and the surrounding tissues and causing a great deal of anxiety and sometimes the need of quite difficult surgery. Nowadays the risk of this happening is very small indeed and I have not had to carry out corrective surgery for apparent breakdown of a capsule from a modern implant made in the last 10 years.

I think this is because the shell of the implant is now much stronger than it used to be but we may see the problem of eventual disintegration of the shell of the implant in patients who have had the implants in for 20 or 30 or 40 years. This is still unknown. This is why it is so important for you to realise that there is a very high chance that if you have breast enlargement surgery you will need some kind of secondary surgery in the future. If the shell of the implant does disintegrate the gel inside the implant continues to be contained within the capsule which the person has made around the implant. In these patients there is often no apparent change in the shape of the breast and the breast continues to feel completely normal and comfortable. If, however, the implant contains salt water only it will gradually deflate over a few days so that the person will revert to their original small size.

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It would then be up to the individual to decide whether or not they wanted to go through the same operation again and have the old implant removed and a new one put in its place. This can be a fairly straightforward operation if one doesn't bother to remove the scar capsule which is made around the original implant. If, however, the capsule has to be removed the operation can prove quite difficult for the surgeon.

There is no evidence to suggest that a person is at significantly increased risk of disease if it is found that a silicone gel implant has "ruptured". Only if they have serious symptoms of discomfort or unsightly alteration in the shape of the breast is it then considered absolutely necessary to operate to remove the old implant.

The track record of some of the newer types of implants is still relatively short and so we don't have proof of what the long-term outcome is going to be for people who have had the newest type of implants. There was great enthusiasm for the use of Soya filled implants called Trilucent but these had to be withdrawn because of fears that the Soya material could eventually cause cancer.

There are uncertainties about the durability of the material inside Hydrogel implants, although these are still in use at the time of writing this information sheet. We believe that the shell of new implants is likely to be more resilient than the shell of implants made in the 1980s and early 1990s. One of the new type of implants, which has been available for the last 6 or 7 years, contains a much more solid type of gel known as Cohesive gel. These look and feel a bit like soft rubber and so have a very firm shape. If one were to puncture or cut the implant accidentally (or on purpose) there would not be any spillage of silicone. This assumes of course that the physical structure of the implant doesn't change with time. We don't in fact know how durable these Cohesive gel implants are at the moment. We think that it is less likely that they will have problems with leakage than the conventional silicone gel implants. However, the price one pays for this is that the implant is very much firmer than the soft more natural feeling standard implant.

If you happen to have Hydrogel implants in place the presumption at the moment is that if there is disintegration of the shell that the Hydrogel will break down and will behave very much like a saline filled implant, ie they will gradually deflate and the breasts will go flatter.

Breast implants never rupture from travelling in aeroplanes.

THE FEEL OF THE BREAST

The type of substance inside the shell of the implant will affect its feel dramatically. The most natural feeling implant is one containing silicone gel. The least natural ones are those containing watery fluids, The Hydrogel gel containing implants attempt to mimic the soft feel of the silicone gel. In my opinion they do not feel as natural as the silicone gel does. Cohesive gel implants, if placed underneath the muscle, feel very little different from the standard silicone gel ones. However, if they are placed in front of the muscle, so that they are feelable through thin breast tissue, they will feel much firmer than the standard silicone gel ones.

The feel of the breast after the implants have been inserted depends on many factors. If there is already a lot of breast tissue and fat in front of the implant it is very unlikely that one will be able to feel the implant easily through the skin. If, however, there is very little breast tissue and very little fat then it is very likely that not only will one be able to feel the implant easily but it will probably show through the skin. If the implant is under-filled so that the shell is very lax and foldable, it is very likely that it will be possible to feel the implant through thin skin and fat. Many women find this distressing. If a silicone gel material is used as a filler it is far less likely that it will be possible to feel it through the skin. If the implant is made quite tense by filling it with much more substance it will usually take on a slightly rounder shape. However, it will feel unnaturally springy and elastic and this can feel almost as peculiar as having wrinkles within the breast. As with under-filling, however, silicone gel implants tend to feel more natural if tense than equivalent fluid filled ones.

It is claimed that semi-solid silicone implants, which have virtually no flexibility, can nevertheless feel moderately natural if placed correctly.

IS IT SAFE TO HAVE SILICONE IN YOUR BREAST

The UK Ministry of Health commissioned an enquiry into the safety of silicone implants. A committee was set up on three separate occasions over the past 10 years to study all the available scientific evidence about whether silicone is safe.

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The most recent committee reported in 1998, and concluded unanimously, that there is no evidence to support the idea that silicone implants cause disease outside the breast. If you wish to read the document which summaries their findings you can obtain a full copy by telephoning **0171 972 8000**. I attached a photocopy of the first few pages of this document which summaries what they have said.

Many people fear that all silicone sets off a train of events inside the body which can result in the person feeling unwell. The vast majority of people who have silicone implants never experience such symptoms. Therefore, it has proved almost impossible to say whether someone who does feel unwell after having had silicone implants is suffering as a result of the implants or due to another condition which they were going to get anyway. It would be helpful to have a single test to measure whether or not silicone implants are causing disease but there is no such simple test at the moment.

Many people have tried to measure antibodies to silicone but the interpretation of the results of these studies is very controversial. Every surgeon has a different view of this subject. In my experience there are certainly a small number of women who about 10 years after the operation develop some aches and pains behind or within the breasts with the implants. In the vast majority of cases if the implants are removed the aches and pains disappear. I believe that the aches and pains are due to the physical dragging effect on the muscle behind the breast.

I believe that the scar tissue which has built up around the implant causes some tenderness and aching at a time when there might otherwise be some natural sagging of the breasts. Some patients are relieved of their aches and pains by wearing a better supporting bra.

It would be helpful to have a simple test to find out whether an implant has ruptured or disintegrated. Certainly expert radiologists using ultrasound scans or MRI scans may be able to detect the presence of ruptured implants. There is not yet enough evidence, however, to show whether or not rupture of an implant is doing any particular harm or causing any particular types of symptoms. There is no doubt that many women who have ruptured implants have no problems at all, and there are a lot of women who have aches and pains in whom the implants are still perfectly intact and not ruptured.

The most recent articles written on this subject suggest that the silicone elastomer shell of silicone gel containing implants seldom rupture in less than 8 years but it is very difficult to assess quite how many are likely to rupture thereafter. My advice to patients at the moment who choose to have silicone gel containing implants is that although it is possible that the shell might disintegrate after 10 years, that this will probably not trouble them at all and that they will be totally unaware of it. If they do develop symptoms which might be caused by a change in the implant then it may be sensible to either scan the breasts or to carry out an exploratory operation to remove the implants and insert new ones. In the early 1990s it was appreciated that the texturing of the shell of the silicone gel implants (“making it fuzzy”) reduced the tendency of the body to make a very thick, hard scar or capsule around the implant. This is particularly true if it is placed in front of the muscle. The indications are that these textured shells, because they have been purposefully thickened are likely to have a better track record of remaining stable and intact than previous smooth shelled implants.

There is still a tremendous amount not known about silicone implants but we do believe that they are not causing any serious harm. We still don't know for certain whether there is a tiny percentage of the population who have a peculiar adverse reaction to silicone, but we certainly believe that the vast majority of women will have very few problems indeed for at least 10 years after the implants have been put into the breasts, but thereafter there is a probability that capsular contracture will affect more and more women and eventually they will require an operation to try and restore a natural appearance and feel to the breasts.

THE CAPSULE

One might expect that if one puts something very smooth underneath the skin of a human that there will be very little reaction to it but in fact smooth surfaced objects tend to cause the body to react far more than a rough surfaced object.

When silicone implants were first used it was recognised that a scar would form next to the implant and encircle it like a capsule. In some women this capsule would remain thin and soft and flexible so that the breast would remain soft and natural feeling. In some women however the scar would tend to thicken and harden and tighten and squeeze the implant so that instead of remaining relatively flat, like a flying saucer, it would be compressed into a spherical shape like a cricket ball.

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From the outside the breast would feel very hard and uncomfortable and sometimes the new hard capsule would feel very tender.

This capsular contracture, as it is called, made the breast feel unnatural and uncomfortable in up to 30% of women, particularly if the implant was placed in-between the breast and the muscle which lies immediately behind it (suprapectoral). It was found however that if the implant was placed behind the muscle where it was going to be squeezed by the muscle every time the muscle contracted, then the number of women suffering hardening and tight capsular contracture was far less. Only 5-10% of women with implants behind the muscle developed the problem of uncomfortable, hard capsules.

It was noticed that a particular brand of implant which had a special foam wrapped around it seemed to have no capsule contracture problems at all. It was then realised that a rough surface to the implant reduced the problem of capsule contracture. Whereas the smooth surfaced implants had a 30% contracture rate if placed immediately behind the breast, the textured implants had only 5-10%.

If one places a textured implant behind the muscle however, there is no extra benefit and the capsule contracture rate seems to be the same whether the implant in this position is smooth or textured.

Any woman contemplating having breast enlargement surgery must accept that she has a 5-10% risk of the breasts becoming unnaturally firm and possibly uncomfortably firm despite the fact that textured implants will have been used in her. It is not possible to say when this firmness is likely to arise but in most cases it appears some time after the first two months and it seems that the longer the implants are present, the more likely it is that the firm encapsulation will occur. Reports about this vary enormously but my own personal experience suggests that women with implants present for 10 years are very likely to have firmish breasts which feel unnaturally firm, although this doesn't necessarily worry them particularly. If it occurs there is not much that one can do to prevent it from worsening. Some people believe that firm pressure on the breasts may help to reduce the capsule formation but I am not convinced about this.

If you research this subject on the Internet you will come across articles about a medication which has been found to soften capsules. This is known as Zafirlukast. This is a drug which has been found to be helpful in certain cases of asthma, particularly asthma induced by exercise.

Unfortunately, it can have unwanted side effects. This drug is not licensed for use as an anti-capsule medication and so I would not be allowed to prescribe it for you even though I thought that it might be helpful. If this drug does acquire a license for the purposes of trying to reduce capsules then it might be worthwhile trying it and it could be prescribed for you in the United Kingdom.

I have known patients in whom they appear to be developing a firm capsule around their implant, but it then softens again over a period of months and the problem seems to disappear. I am totally unable to explain this. In the vast majority of cases if a person develops a very firm capsule it will not disappear by itself.

If a person does develop a very firm capsule which distorts the shape of the breast and which feels uncomfortable then there are various options open to that person. Nearly all of them involve more surgery. One may of course wait patiently in the hope that the problem will get better but in my experience it seldom does once it has been established for 6 months or more. The options include removing the implant and leaving the capsule alone and simply allowing the breasts to return to their original size and shape, but most women find this totally unacceptable. An alternative is to remove the implant and the capsule around it and replace the old implant with a new one, probably of a different brand, in the hope that they will not react in the same way a second time. Alternatively one can remove the old implant and then insert the new one on the other side of the muscle from where it had been previously, ie if the first implant had been underneath the muscle, the second implant will be placed in front of it. The essential idea here is that one is attempting to put the new implant back into "virgin territory".

Unfortunately, experience has taught us that once a person shows a tendency to develop a very hard capsule it is more likely that they will do the same thing again. However, there are enough people in whom it doesn't happen a second time to make it worth trying to do this even so.

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BREAST CANCER AND MAMMOGRAMS

It has been found that women who have breast implants have a reduced rate of breast cancer as compared to the general population. We don't have an explanation for this yet. Some people think it is simply due to the fact that people with very small breasts have a lower risk of breast cancer but I don't think the explanation is quite as simple as this.

The presence of an implant behind the breast tissue or behind the pectoral muscle usually makes it easier rather than more difficult to detect the presence of a lump in a breast. If the person has developed a firm capsule it is usually very easy to palpate the breast over this firm base. Therefore, the detection of a new lump in a breast should be no more difficult after breast enlargement than in a breast that has never been enlarged. However, if a person develops a lump which the expert believes may be a cyst, then extra special precautions have to be taken in trying to put a needle into the cyst for fear that they might otherwise puncture the implant and rupture it or because very occasionally what feels like a cyst may in fact be a bulge of the silicone implant.

It is unusual in the United Kingdom for women to have a mammogram to detect the presence of breast cancer if they are under the age of 50. Therefore, women who have had breast enlargement surgery may well have had implants for 15-25 years before they ever get called for their first mammogram.

Taking x-rays of the breast is not particularly comfortable for the patient. The breast has to be squeezed very firmly. If they have an implant in the breast this can be particularly uncomfortable and it might even damage the capsule or the shell of the implant if the pressure is too forceful. The implant may interfere with achieving satisfactory survey of all the breast tissue and it may require special skills on the part of the radiologists to interpret the results. Nevertheless, you should not be put off from having a mammogram because you have had breast implants. Certainly it is very important that you should tell the breast screening unit that you have had implants before undergoing any mammogram or other investigation on your breast.

Ultrasound examination may be more appropriate than mammograms as a way of detecting breast cancer when there is an implant under the breast.

It depends upon availability of a skilled radiologists or ultrasonographer to be able to distinguish the signs of breast cancer on ultrasound examination. Some breast screening units have highly skilled radiologists who are very good at this and in whom the reliability of their opinion is as good as that with mammograms, but you would have to ask about this if and when you come to have breast screening.

INJURY TO THE BREAST AFTER IMPLANTS

Most implants are very strong when they are first put inside the breast. One would be able to stand very firmly on an implant without it breaking, and so most implants are able to stand up to knocks or bumps or seat belt pressure. This is certainly true for the first five years or so but thereafter it is quite possible that the shell of the implant becomes weaker and eventually disintegrates. As suggested already if the implant is made with a silicone shell and silicone gel inside, the capsule made by the patient will contain everything without any problems. If, however, the capsule is very thin and weak it is then theoretically possible that silicone could break through it if the breast receives a sudden blow or knock, as in a car accident or a fall from a horse or a criminal assault. If this happens some silicone gel may leak outside the capsule into the breast tissue. This usually causes some discomfort in that area of the breast. This can vary from a slight ache to an extremely tender lump. The breast itself may feel different in its shape and consistency. In many instances it feels softer than before.

There are many women who simply disregard it and carry on as normal and have no further problems, although they are aware that the capsule as they felt it previously now feels somewhat different. There are other women in whom this has happened in which it is possible to alter the shape of the breast quite dramatically by gentle squeezing on the lower part. The silicone gel pushes its way upwards into the upper regions of the breast towards the armpit. In such cases it is usually thought to be sensible to remove all of the silicone gel and the new capsule which has formed around it and to replace it with a new implant. However, if you believe that silicone gel is not doing any harm, as is considered to be correct by the committee on the safety of silicone implants, then there may be no need to remove the broken implant and to replace it with a new one.

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SAFETY OF SURGERY

Before going on to the technicalities of choosing an implant, deciding how big it is going to be, which route to place it into the breast and discussing all the good and bad points about the surgery, it is important for you to understand that all operations carry a degree of risk, and you should understand what some of these risks are.

GENERAL ANAESTHESIA

In theory it might be possible to do this type of surgery under local anaesthetic but I have never come across any patient who has ever had it done under local anaesthetic, nor have I ever met a surgeon who has done it. Technically it would be very difficult and very uncomfortable for the patient. It might be done under so-called twilight anaesthesia, which is almost the same thing as a general anaesthetic without having a tube down the throat. I would certainly not recommend this operation under local anaesthetic however. If you know that you have a particular risk from general anaesthesia then this has to be discussed carefully with the surgeon and/or the anaesthetist.

A lot of people feel unwell after a general anaesthetic because they feel sick or dizzy. Certainly you should not attempt to drive a car for at least 36 hours after a general anaesthetic. After you have had a breast augmentation it would be unwise to drive a car for about a week anyway because your chest will be tender and you will have to wear a safety belt across it.

The risk of something going badly wrong under a general anaesthetic is very, very small indeed nowadays. The risk of dying from having a general anaesthetic for something which is not an emergency but covering people in all ages and states of health is about 1 in 10,000. The risk in fit young women who are in excellent health is probably only 1 in 100,000.

OTHER RISKS OF SURGERY

Bleeding is bound to occur when one makes the space to insert the implant. Bleeding can usually be stopped very easily and surgeons ensure that there is no bleeding by the end of the operation. Nevertheless, a few patients start to bleed again after the operation has finished when they are back in bed and recovering from the operation. These patients develop what is known as a haematoma, which is simply a collection of blood in the space next to the implant. The risk of this happening is in the region of about 1%. It is much more likely to occur in a woman who has a bleeding tendency.

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There are two ways in which you can reduce the risk of developing haematoma. The first is to try and time the operation to the mid-cycle because bleeding is often greater at the time of the period. The second thing is to avoid all medications which are likely to increase bleeding. These are mostly the Aspirin-like drugs, which affect the ability of the blood to clot. Aspirin has an effect on platelets which are one of the important components of the blood responsible for making a clot. If a blood vessel is bleeding you want the blood to clot quickly but if this is prevented by Aspirin then a haematoma may form.

There are lots of drugs which act rather like Aspirin, and it is very important that you should be given a list of these drugs so that you know what to avoid for the two weeks prior to the operation. The only case of haematoma which I have had personal experience of in the last five years occurred in a person who had taken some Nurofen tablets on the day before the surgery, and who didn't realise that this had an Aspirin-like effect and forgot to mention it when she came for the operation.

INFECTION

The risk of developing an infection with this operation is, fortunately, extremely rare. It is my own practice always to give patients an antibiotic at the time of the operation which they will continue for a few days after the surgery. Not all surgeons think it is necessary to give antibiotics but I do so "just in case". In women this can sometimes give rise to the problem of thrush for which there is a simple remedy of taking the one dose Diflucan. A very small number of people get an upset tummy from taking antibiotics but this is relatively rare with the type which I use currently, called Cephadrine or Cefalexin.

A few patients have irritation from the dissolvable stitches used to close the wound. They occasionally work their way up to the surface and irritate the skin causing some local inflammation and/or infection. This is usually best dealt with by taking out the stitch and applying a small amount of antibiotic ointment to the area. Fortunately, it is an uncommon problem and I have never known it to cause the wound to weaken or open up.

DEEP VEIN THROMBOSIS

Any person who undergoes an operation under general anaesthetic has a theoretical risk of developing a thrombosis in the legs. Such a risk is relatively low in a fit young person but we always take precautions against thrombosis. We do this by either putting special compression stockings on the legs while the person is in hospital or applying a special compression device to the calves of each leg. This has been shown to reduce the risk of thrombosis. There are special medications which can be given to reduce the risk of thrombosis. These are certainly used for very sick patients undergoing major surgery on the abdomen or chest for example. However, nearly all of these medications thin the blood and make it far more likely that they will bleed. This is just the opposite of what one wants. Therefore, we never use Heparin or Heparin-like substances to prevent thrombosis in people who have breast augmentation, unless we know in advance that that particular individual has a very high risk of thrombosis because they have had this problem in the past.

OTHER RISKS OF SURGERY

There are lots of other rare but sometimes annoying problems which arise from having an operation. These include the nuisance of having a needle in the back of the hand to deliver drugs and the occasional bruise which can arise from this. Some people are allergic to the solutions used to sterilise the skin at the time of the operation and a few people are allergic to other medications which might be given as a matter of routine. A few people turn out to be allergic to the adhesive plasters for keeping the dressings in place and a few people react to the anaesthetic drugs. Many of these types of problems are a nuisance but seldom cause major problems.

If you know that you are allergic to something please warn the nursing staff and the doctors and anaesthetist to minimise the risk of being given the drug to which you know you are allergic.

PAIN

Anyone having an operation realises that they are likely to experience some pain.

Fortunately, breast enlargement in which the implants are placed between the muscle and the breast tissue causes remarkably little pain. It is usually controllable by one injection of Morphine or similar agent immediately after the operation.

This is then followed by Paracetamol or something very slightly stronger (Co-Codamol, Tylex, etc). Many women say that the discomfort they feel is very similar to that experienced by women who develop breast enlargement during pregnancy. They have a tight, full feeling which is not necessarily desperately painful but simply uncomfortable.

If the implant is placed behind the muscle this is usually more painful than if it is placed in front of the muscle. This is because the muscle is being stretched far more than usual and is often quite badly bruised. It can take several days for the pain to die down and stronger painkillers may be needed. The person may not be able to swing their arms very comfortably or stretch their arms above their head comfortably for a week or so. Once the pain has subsided they will experience no more pain than with the implant being placed in front of the muscle. In general most patients having breast augmentation feel completely comfortable within a week of the operation, although nearly everyone experiences peculiar, sudden shooting pains in the breasts for up to a month or two. This is particularly true when they turn suddenly and the implant shifts inside the breasts momentarily causing a mini pull on the new scar which is forming around the implant. These shooting pains are a nuisance but nothing to worry about. Patients often find it uncomfortable to lie on their side in bed and have to lie on their back for the first week or two. It may be a month before they can lie very comfortably on their front.

ASSESSMENT OF YOUR PROBLEM

When you come to see the consultation about the operation he will want to know various things about you. These include your height, weight, clothes measurement, breast size (bra measurement) and what size you would like to be after the operation. He will want to know whether or not you have ever been pregnant and whether you have breast fed a baby and how important sensation in your nipples is to you. It is essential to take photographs of your breasts with you standing first with your arms by your side and then on your hips and then above your head.

It is important to note any difference in the size and shape of the two breasts. It is extremely common to find that one breast is bigger or lower than the other. The photographs are then kept as a record of what you were like before the operation and also to be able to compare yourself with other people in an album of photographs showing the before and after results. This is a helpful way of predicting the type of changes that you are likely to have from your surgery.

Many people have slight differences in the shape of the rib cage on the two sides. Sometimes the rib protrudes on one side and dips in on the other. This may make it quite difficult to get the breasts to look absolutely symmetric. If you have a slight twist to your spine (scoliosis) this can make it extremely difficult to get a perfect looking pair of breasts because the view from the front to an observer is completely different from the way the person sees their breasts looking down at them from above.

This will need to be discussed very carefully with the surgeon and it will be worthwhile buying a bra of the size which the person thinks they want to be and then filling the bra with bags containing rice whose volume can be measured.

In fact I recommend this as a method of working out how big the implants ought to be. Please note there is an extra sheet of instructions on the problem of deciding how big the implants ought to be.

It is often helpful to have more than one consultation so that you can have some thinking time after the first consultation and before committing yourself to an operation. There are of course some people who have decided in advance that they are going to have the operation regardless of whatever they are told. There are some people who have done all the reading up about the operation and know every aspect of it without needing to discuss it. Nevertheless, in general it is a good idea to have two consultations rather than one because it gives you the opportunity of checking and rechecking what has been discussed and agreed.

It is often helpful for people to see implants and their different sizes and types. You will need to discuss the various types of implant and their advantages and disadvantages. You will need to discuss whether or not it is sensible to put the implants in front or behind the pectoral muscle. The shape of the breast is slightly different according to where they are put. If your breasts already droop it is very important to put the implants in front of the muscle (to avoid a double swelling). If the breasts are very small and there is very little fat in front of the muscle, then it is usually better to put the implants behind the muscle to avoid the outline of the implants being seen through the skin. If, however, you are very athletic or do a lot of aerobics in a leotard, the muscle contraction may flatten the breast every time you contract the pectoral muscles and this might be visible to someone who is staring at your chest.

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SIZE IF IMPLANT

The volume needed to increase a person's cup size depends very much upon the size of the chest. Somebody with a very small chest, ie 32, may need only 150mls to go up by a cup size, but somebody with a 36 or 38 chest may well need 250-300mls to increase them by a cup size. This is why it is so important to try and work out how much bigger you think you want to be by going out and buying a bra which you think you may want to be using in the future and then filling it to see whether it is going to be the right kind of shape and size.

It is worth investing the £20-£30 to buy a bra this way than to depend on luck. You should realise that it is going to cost you several thousand pounds to have the operation and so it is worth spending a few tens of pounds to get the size right.

Most people wanting a breast enlargement operation choose to have a size which increases them by two cup sizes (from AA to B: A to C: B to D). However, everybody is different in their likes and dislikes and there is no doubt that a two cup size increase in a very small flat chested person who has never had a child is sometimes too dramatic for them. Somebody who is already a large B cup may need a very large implant indeed to make a really worthwhile enlargement.

There is no rigid formulae for working out precisely what size to use to gain a particular cup size increase. However, I have found from experience that on average most people wanting one cup size increase require an implant of about 200ccs, whereas a person wanting a two cup size increase usually requires a 300ccs implant. It is very unusual to put in implants larger than 400ccs. In the few people in whom I have done it, I have never thought the result to be particularly good because they look excessively large. The cost of the implants is the same regardless of the size and so you don't have to pay anymore for larger implants than small ones.

SCARS

The implants are introduced through a cut in the skin which can either be in the groove underneath the breast or in the margin of the areola, which is the brown part next to the nipple, or through a crease in the skin in the armpit.

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I have used all three approaches but find that the easiest route and usually the safest is the one made through the groove underneath the breast. It is the most direct method, certainly the quickest and gives the best view of the cavity into which one is going to put the prosthesis. I believe it is the safest method. The scar which results from this should lie close to or just above the natural groove.

It is never possible to promise that it will be in the groove itself because the position of the groove moves as soon as one enlarges the breast. One has to make a calculated guess as to where the new groove is going to be situated. Provided it is not below the natural groove the scar is usually acceptable. It is about 2" long and should not be seen easily from the side. It will only be noticed in someone lying flat on their back if they are naked. The scar is always pink/red in colour at first and will then gradually fade over a period of a year or two years. In a few unlucky people the scar may swell and thicken and harden and become hypertrophic. This is usually associated with intense itchiness. This phase of unpleasant thickening may last for 3-4 months but nearly always clear up by itself without any special treatment. Sometimes it can be helped by the application of a silicone gel on the outside. If this thickening does occur the scar usually ends up slightly wider than usual but it is still well hidden on the underside of the breasts and usually does not cause comment.

SYMMETRY OF BREASTS

If the breasts are different in size and shape or position before the operation, it is very probable that they will remain different after enlargement. It is sometimes possible to reduce the difference in size by putting a large implant into the smaller breast. However, it is seldom possible to alter the height of the breast on the chest wall if they start very differently. Therefore, if you have a firm forward pointing breast on one side but a droopy breast on the other they will remain forward pointing and droopy after the operation. However, it may be slightly more apparent after the operation than before it because of the increased size of the breasts. Obviously the surgeon tries his best to correct anything that is easily correctable but sometimes there are some things which can't be corrected.

SENSATION OF NIPPLES AND OTHER AREAS OF THE BREASTS

The nipple is served by nerves. These come from all directions to the nipples in most people. In a few people there is only one main nerve going to the nipple.

If this happens to be damaged by stretching or cutting as one is making the cavity to put in the implant, the nipple may lose its feeling. It is never possible to predict in whom this problem is going to occur. Fortunately, it is relative rare. I am not sure of the exact incidence but my impression is that it occurs in about 1 in 30 people. It seldom occurs in both nipples but I have known of one or two cases where both nipples have been completely numb permanently. This is obviously very important for some women, particularly those who derive a lot of sexual pleasure from their breasts and for those who are likely to want to breast feed in the future.

I do not know of any way of modifying the technique to ensure that the nerve to the nipple is not damaged. If, therefore, this is a very important matter to you, you must discuss it carefully with the surgeon before agreeing to the surgery.

Apart from loss of feeling in the nipples some women also lose some feeling in other parts of the breasts. The commonest place to lose feeling is on the inside close to the mid-line. This is usually due to stretching of nerves and nearly always recovers. A few patients end up with small patches of numbness on the outside of the breasts which is permanent but these seldom cause any annoyance or problem.

Hypersensitivity

A few patients, after breast augmentation, experience a sudden increase in the sensitivity of the skin of the breasts and/or the nipple and areola. We have no idea why this should happen, but it must be something to do with stretching of nerves or division of some of the tiny nerves which one can't see when one does breast enlargement. Patients complain of pins and needles or pricking or burning sensation in the skin of the breast or in the nipple and areola. These sensations can occur without the breast being touched and aren't made any worse by massage or touching the breast but equally well are not relieved by massage. Some patients don't have any problems when the breasts are at rest but they can't tolerate fondling the breasts and they can't tolerate very firm bras.

This kind of problem usually doesn't occur immediately after the operation but appears as a problem about 4 to 6 weeks after the surgery.

There isn't very much that one can do about it except wait for it to settle spontaneously. Normally this takes about a month or 2 and the problem disappears. It has something to do with regeneration and repair of nerves. In a few people they get so desperate that they need medication to overcome the discomfort in the skin and occasionally it is worth giving the patient the drug Amitriptyline which somehow modifies the abnormal sensations they experience from the hypersensitivity of the nerves. It is usually a medication which is given in small doses at night time. Fortunately this type of problem only happens in about 1% or 2% of people and it is extremely unusual for it to persist longer than a few months.

SOFTNESS OF THE BREASTS

The breasts in the early stages after the surgery often feel very firm indeed and the patient may well worry about this a great deal. Fortunately, the breasts usually soften rapidly over the first month and within a month or two they will feel completely soft and natural. There are a few cases where the softening takes longer and in my experience these are usually the patients in whom the implant has been put underneath the muscle.

SWELLING

All tissues tend to swell when they have been injured by surgery. The breast is no exception and one can expect a degree of swelling in everybody after this surgery. The amount of swelling is certainly not more than half a cup size and it is usually far less than this. Nevertheless it is not sensible to go out and buy a lot of new bras the day after the surgery because the breast may be a bit swollen at this stage.

It would be wise to wait for a week or so before buying any new bras. If you feel the need to wear a bra soon after surgery it is best to use a soft sports bra with no underwiring. This will enable you to wear a bra over the dressing on the wound without it hurting. Some people find it more comfortable to wear a bra in bed at night for the first few days after the operation but not everyone agrees about this.

SUCTION DRAINS

You can expect to have a small plastic tube coming out through the skin close to the breast on each side after your operation for about 24 hours. This allows for removal of any of the fluid which forms around the implant during this time. It is often a help to the surgeon to show whether or not the person has any significant bleeding. It helps the patient because it reduces the amount of blood around the implant and, therefore, reduces the risk of extra scarring which might contribute to a capsule because blood can be an irritant and seems to provoke more scarring if excessive.

Nearly all patients can have their drains removed before they leave hospital. There are a few exceptions. If the person has oozed a great deal and the drains appear to be draining a great deal of fluid then it is sensible to keep them in place until they stop draining significant quantities. It is always possible for patients to return home even with the drains in place and for them then to return to the hospital once the drainage seems to have lessened. It is far more likely for this to occur in someone who has had the implants placed behind the muscle because the bruising of the muscle nearly always causes more oozing than if the cavity is made in front of the muscle.

SUCKLING

Provided the person has kept sensation in the nipples there should be no problem at all in their ability to breast feed. We know of no reason why women should not become pregnant after they have had breast enlargement surgery with silicone implants. In theory there is a possibility that silicone might enter the milk. Whether there is any greater risk of this happening in people who have had silicone filled implants as compared to saline implants we do not know. Certainly there is no evidence to suggest that babies come to any harm when breast feeding from mothers with implants.

STRETCH MARKS

Breast enlargement surgery can cause stretch marks to occur in rare cases. I have seen this happen in young women who have had their breasts enlarged by more than two cup sizes but I have never seen it happen in someone who has already been pregnant and whose breasts have stretched a lot in pregnancy. If the person already has stretch marks, then it is unlikely that they will get any worse from breast enlargement.

SAGGING

The skin of the breasts is going to sag eventually as the elasticity of the skin diminishes with age. If the breasts are heavier as a result of breast enlargement it is likely that they will sag more. It may, therefore, be helpful to wear a supportive bra rather than going topless to prevent the problem of sagging but I suspect that the skin type of the individual is probably more important or as important as any other factor in determining the amount of sag.

SORENESS OF THE NIPPLES

Most women who have just had breast enlargement find that the nipples are very tender because they are thrust forward. Some women find that their nipples are extra sensitive for several months after the operation. A few say that this is a very pleasant experience but most find it to be a bit of a nuisance but I have never known it to be a permanent problem.

STITCHES

Different surgeons use different methods of closing the wound. My preference is always for dissolvable stitches so that there are no marks on the outside due to stitches and there is no need for the patient to return specifically for the removal of stitches. I always arrange to see patients a week or so after the surgery to make sure that all is well but stitch removal is not necessarily part of this.

SEROMA

This is a rare but serious complication of breast enlargement surgery. It is said to occur in up to 1% of people. I have only known of a relatively small number of cases. The breast suddenly enlarges some years after the implants were inserted and a vast quantity of fluid is formed around the implant. It is like a blister forming around the implant. No-one knows why this happens. We have no clues as to what sparks it off but have found from bitter experience the only way to stop it is to remove the implant. Sometimes one can try putting implants in again at a later stage but there is a higher risk that the seroma may return.

I know of some patients who have a chronic but mild seroma problem, ie their breasts seem to fluctuate in size and it would appear that exercise is what provokes it. I know of one particular patient who likes to go the gym but if she does a lot of weights it seems to provoke seromas. After a few days they settle down again.

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OTHER MINOR PROBLEMS

Shooting pains:

A lot of women experience tiny shooting sensations inside their breasts occurring several times a day in the first few weeks after their operation. Occasionally these last for 2 or 3 months but it is very rare indeed for them to persist after this. We think these are due to minor movements of the implant inside the breast.

Surgical emphysema:

Air can get trapped underneath the skin as the implant is inserted into the breast. This can be felt through the skin sometimes after the operation and the patient may be worried. It is in fact nothing to worry about and the air gets dissolved away within a day or so.

Allergies to surgical tapes and antiseptics:

A few very unlucky people turn out to be allergic to sticky tape or allergic to the antiseptic solutions used during the operation. This can cause unfortunate rashes or blisters but it is very unlikely to actually interfere with the success of the operation. Occasionally a blister can leave a mark on the breast for a few months afterwards but it is very rare to cause a permanent discoloration.

Submammary bands:

In a very small number of cases patients notice, 2 or 3 months after their operation, that they can feel a tightness in the skin running down from below their breast towards their abdomen. It doesn't always happen on both sides and no-one really understands why it occurs at all. I have found from experience that it nearly always disappears by itself and it can be helped to go simply by massaging it firmly for a few days.

THE SHAPE OF THE BREASTS AFTER SURGERY

The shape of the breasts after surgery is mainly determined by the shape of the breasts and state of the skin before the surgery. If the skin is very lax beforehand the breasts will fill out forwards but will tend to droop as well. If the skin is very firm the breasts will take on a more conical shape as in the adolescent breast. Slack or very droopy breasts can only be lifted successfully by also tightening the skin at the same time.

This of course necessitates scars on the underside of the breasts and around the nipples and most women wanting breast enlargement don't want scars. A compromise has to be reached in such cases of very droopy breasts. If you want very firm breasts you are going to have to have very large breasts if they start very droopy. If you don't want very large breasts then the skin will have to be tightened by cutting out some of the skin and this inevitably means scars. The operation of reduction of skin is called mastopexy or mammopexy. This operation carries its own particular problems and risks and you would have to ask about this and to be given an information sheet about it, if this is what you need.

TIMING OF THE OPERATION

It takes between a few days and three weeks to get over the discomfort of the operation and the tiredness caused by the general anaesthetic. A busy housewife with small children may need help to look after the children for several days. A fit young woman with a manual job may need a fortnight or more off work, whereas a secretary might need only a week off.

Some women imagine that it might be a good idea to combine the operation with a holiday. This is a reasonable plan if the holiday is a quiet period at home or with relatives or friends elsewhere, provided they can get to a hospital if there should be any problem. Ideally they should remain within easy travelling distance of the surgeon who did the operation.

It is folly to go on an overseas holiday a few days after the operation. Many women want the operation so that they can look their best on a seaside holiday. It is far more sensible to have recovered fully from the operation first so that they can enjoy beach sports and swimming and an active social life.

It is often possible to combine breast augmentation with other forms of surgery if the person happens to need it. This may save an extra general anaesthetic. I often carry out facial cosmetic surgery and breast augmentation at the same time, or breast augmentation and abdominal surgery at the same time. It is usually best to do the breast augmentation first being "the cleanest part of the surgery" so that there is no risk of infection.

PROBLEMS WHICH CAN ARISE AFTER THE OPERATION

Women often develop lumps or bumps in their breasts which they worry about and need to have checked. The best person to check the breasts is either the surgeon who carried out the breast augmentation or a surgeon working in a specialist breast unit.

It is important for the patient to know the details of their breast enlargement operation. Please remember to keep a note of the date and place of the operation and the name of the surgeon and the type of implants and their size. This should be kept secure like your passport so that you can produce it as and when needed.

If you need to have a special breast examination in a specialist unit you must remember to tell them that you have breast implants and to be very cautious about allowing anyone to put a needle into your breast. It may be better to have an operation to remove a lump under direct vision than allow someone to try to put a needle into it. If a needle is passed into the implant accidentally it will almost certainly leak whatever it may contain.

I have prepared a separate information sheet for patients about the period after the operation. It may be helpful to read this but keep separately for when you have had the operation.

This information sheet has been written by Mr H P Henderson, Consultant Plastic Surgeon and supersedes information sheets in April 1991 and March 1999.

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