# **Breast implants**

# What types of implants are available

Breast implants may be referred to as Breast Augmentation. There are two types of implants that are commonly used in the UK - Silicone and Saline. Both implants have a silicone shell (outer layer) which can be smooth or textured.

Silicone gel implants are the most commonly used. They are filled with either a firm, jelly-like silicone or a softer, fluid silicone. The firm implants are less likely to leak. Saline implants are another option but are not used as often as they are more prone to leakage and deflation. Both implants come in two shapes, either round anatomical (breast shaped/ tear-drop) or design. Mentor www.mentormedical.co.uk implants are FDA approved and contain high cohesive gel. Nagor is UK company, however the implants are not FDA approved. These manufacturers provide a life-time warranty on ruptures and leaks.

# 'Under' or 'On top of muscle' placement of breast implants

If you have more than 3 cm of thickness of breast tissue in the upper half of your breasts (ie padding to disguise the edges and folds of the implants), then you can have implants placed in the subglandular (on top of the muscle) plane. However, if you are slim, then it is advisable to place the implants under the muscle (subpectoral), or in the dual plane (partially under the muscle in the upper part of the breast). Dual plane is usually chosen in women where there is some 'droopiness' of the breasts. It is important to bear in mind that when the implant is placed under the muscle or dual plane the muscle fibres along the sternum (breast bone) are not divided.

#### Important issues:

- 1. If you can feel your ribs with your finger, beneath the breast or at the side of your breast, you will be able to feel the edge of your implant beneath your breast and at the side of your breast. If you are thin or have very little breast tissue, you will be more likely to feel your implant.
- 2. Currently manufactured implants that strive to achieve durability of the shell have a thicker shell to prolong the life of your implant, and a thicker shell may be easier for you to feel. If feeling an edge of an implant shell could be a problem for you, do not have an augmentation.
- 3. The surgeon cannot change the quality or thickness of your tissues. If you are thin or have very little breast tissue, you will be more likely to feel your implant.

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4. The larger your implant, the worse your breasts will look over time. A larger implant will stretch your tissues over time and will cause more tissue-thinning and sagging than a smaller implant. Your tissues do not improve with age, and they will be less able to support the additional weight of any implant, especially a larger implant.

#### What if I smoke or vape?

Smoking or vaping can reduce the blood flow to surgical sites. Studies have shown that nicotine and other substances that are found in cigarettes can be harmful to your heart, lungs, and your skin. Smoking can have an adverse effect on the healing of all surgical wounds. The same applies for the use of nicotine replacement therapy as, although this will reduce the craving for a cigarette, the nicotine will also reduce the ability of the blood to carry enough oxygen to the tissues. For this reason we advise that you should not use nicotine replacement whilst in hospital. It is also advisable to stop smoking 6-8 weeks prior to surgery and remain smoke-free until healed or a minimum of 3-4 weeks post-operatively.

If you are taking the oral contraceptive pill or hormone replacement therapy, do not stop taking this medication. Always seek medical advice. Talk to your GP or visit your local Family Planning Clinic. You will need to bring a list of any medications that you are currently taking to the Out-patient Clinic, Preassessment Clinic or with you on admission to the hospital.

# What other arrangements do I need to make?

The hospital stay is normally a day for cosmetic breast augmentation. You should arrange help with shopping, housework and care of small children and pets, as you will not be able to manage these on your own for at least a week after surgery. You will also need to organise at least two weeks off work or college and longer if heavy lifting is part of your job.

You will not be able to drive immediately after your operation, and your surgeon will be able to advise you. However, you should only consider driving when sufficient healing has taken place to allow you to wear a seat belt without pain. Before driving after surgery we suggest that you check with your insurance company to ensure that you have the appropriate cover. Some companies ban driving for a specific period following surgery. Failure to comply with that condition would mean that you were driving without insurance, which the law regards as a serious offence.

# **Pre-assessment Clinic**

Most patients are seen in the Pre-assessment Clinic and, if you are asked to attend, a letter will be sent to you giving the date and time of your

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appointment. If you are not offered this appointment, the necessary tests and investigations will be carried out when you are admitted to a ward.

The pre-assessment admission may include:

- Assessing your general health and fitness before surgery by carrying out various tests and investigations including blood tests, ECG (electrocardiogram – heart tracing).
- Discussing your current medication and any allergies you may have, and information about your planned treatment and about the hospital services.

If you have any further questions, write them down and discuss them with the doctors and nurses.

It is important that you are completely satisfied that you have been given all the information you need and that you fully understand the risks and benefits of your surgery, before you sign your consent form. You can change your mind at anytime before surgery.

What are the risks? Breast implants are a long-term commitment. They are likely to need replacing and further operations will be required to maintain the benefits of the implants. The length of time that the implants last is unknown and varies depending on an individual's personal factors. The commonest reasons for requiring replacement surgery are rupture/leak or capsular contracture and the time period over which this can occur is variable and unpredictable. The risk of re-operation in most women is considered as 31% (1 in 3).

**Capsular contracture** – This is a thin layer of scar tissue (fibrous capsule) that forms around any implanted foreign material (e.g. breast implants). As the scar tissue thickens or shrinks it is noticeable as an apparent hardening of the breast. This is one of the most common complications, although modern implants have a textured silicone shell and have a lower incidence of capsular contracture as they are 'form-stable'. If capsular contracture does happen then you will need further surgery. The implant may have to be removed, along with the capsule, and replaced, if appropriate, with another implant. The rate of capsular contracture is 10-15% at 10 years.

Rupture / leaks- Occasionally implants can rupture or leak. Your surgeon will give you a warranty card with details of the implants after your operation.

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#### **BIA-ALCL**

An uncommon type of immune system cell cancer called Anaplastic Large Cell Lymphoma (ALCL) is linked to silicone breast implants. ALCL is a lymphoma and not cancer of the breast tissue. In women with breast implants, ALCL was found adjacent to the implant itself and contained within the fibrous capsule. The condition presents usually with a late onset seroma (fluid collection around the implant) some years after surgery, persistent swelling or presence of a mass near the implant. Investigations will include a scan and assessment of the fluid around the implant for specific markers such as CD30 and ALK. A diagnosis of ALCL is usually treated with removal of implants and surrounding capsule, though some cases require chemotherapy. The first case was reported in 1997, yet it is important to note that breast implants have been used since 1962, with current numbers showing there are over 10 million women in the world with breast implants. The current lifetime risk of developing ALCL associated with breast implants is placed at 1:15,000.

As of June 30, 2023, the Food and Drug Administration (FDA) received a total of 1264 reports of BIA-ALCL, including death of 63 patients. The risk of ALCL is in the range of 1:2,207-1:86,029 based on different types of textured implants. The overall textured implant risk is deemed at 1:30,000. ALCL were pre-dominantly in Allergan Biocel implants. The risk with Mentor textured implants is estimated at 1:86,029.

Further up-to-date information is in the links below:

https://www.fda.gov/medical-devices/breast-implants/medical-device-reports-breast-implant-associated-anaplastic-large-cell-lymphoma#:~:text=As%20of%20June%2030%2C%202023,lymphoma%20(BIA%2DALCL).

# https://www.gov.uk/guidance/breast-implants-and-anaplastic-large-cell-lymphoma-alcl

There is increasingly accepted hypothesis that bacterial contamination introduced at the time of implant surgery may over time lead to a biofilm that triggers an inflammatory and immune response which in conjunction with a patient's genetic pre-disposition may lead to BIA-ALCL. The creation of a biofilm can be reduced with the use of the 14-point plan. Texturing may contribute to increasing an inflammatory response by increasing the surface area.

Breast implant related Anaplastic Large Cell Lymphoma (BI-ALCL) remains an uncommon condition worldwide. As of Dec 2021, there were at least 81 cases identified in the UK. All information to date suggests that women with breast implants have a very low but increased risk of developing ALCL compared to women who do not have breast implants.

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#### **BIA-SCC**

Squamous Cell Carcinoma is a very rare, but potentially aggressive tumour that appears to emanate from breast implant capsule. It can spread to lymph nodes and distant sites, though it is not a cancer of breast tissue. As of 2023, there were 19 cases reported worldwide in literature. It can occur in both textured and smooth implants.

# **Smooth or Textured implants- The facts**

In most of the world including Europe and Australia, the preference is for the use of textured implants in 90% patients, with only 10% smooth being used. The current breakdown of implant usage in the USA is 87% smooth and 13% textured. This discrepancy is due to the moratorium imposed by the FDA in USA in 1992, which led to US surgeons almost exclusively using smooth saline and of late, silicone smooth implants; whereas the rest of the world progressively continued to use textured implants.

Capsular contracture continues to be the leading cause of breast implant reoperations. The key benefit of using textured implants is reduced capsular contracture. As textured implants provide frictional resistance to movement, they also help to stabilise the implant pocket and reduce skin stretch and 'bottoming out' in the lower part of the breast over time.

Smooth implants, on the other hand, can feel softer, are more easily placed with smaller incisions, however, will have greater movement with some drift to the sides of the breast (lateral slip). They tend to settle in the lower part of the breast stretching the lower breast skin envelope.

Though textured implants have been pre-dominantly been used in the UK and Europe, the concern for the uncommon occurrence of BIA-ALCL has started to influence the discussion regarding the use of smooth vs textured implants. You should discuss with your surgeon what is best for your body shape and breast skin envelope.

#### **Breast Implant Illness (BII)**

Breast Implant Illness is a condition that consists of a very broad range of non-specific symptoms such as hair loss, brain fog, general fatigue, fibromyalgia and other associated conditions such as ME, irritable bowel syndrome, various skin conditions and autoimmune conditions such as lupus, rheumatoid, SLE and Raynaud's.

Many of these patients have tried a range of strategies to overcome their ailments, including nutritional advice, changes in diet and a variety of lifestyle changes. Most of them have reached the conclusion that their breast implants are responsible for their malaise and request explantation.

Though BII has been recognized as a condition that affects some patients with breast implants, currently there is lack of good data and no causal association has been demonstrated in literature so far. The variety of generalised symptoms reported have made it difficult to ascertain the 'true'

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features of the illness and hence an objective diagnosis can be difficult. It is believed that in some patients, a psychological pre-disposition may lead to development of symptoms. Explantation (removal of implants) appears to only work for 50% patients.

https://www.gov.uk/guidance/symptoms-sometimes-referred-to-as-breast-implant-illness

All surgery and anaesthesia carries some uncertainty and risks. The following list gives you information on the most common or most significant problems that can occur following this type of surgery.

**Pain** – The pain from this sort of operation is not usually severe although different people require varying amounts of pain killers (analgesia). You may feel some pain for the first few days especially as you move around. There may be further discomfort for a week or more. The Pain Control team can discuss the options available to you if stronger analgesia is required. If you are in constant pain, let the nursing staff know.

**Blood transfusion** - It is very rare to have a blood transfusion after this operation. If you are found to have a low blood count (anaemia) after your operation, a course of iron tablets will be prescribed. Once you have left the hospital your GP may repeat the blood test.

**Haematoma** – a collection of blood around the prosthesis, which may occur after surgery. We try to prevent this by placing small drainage tubes in the wound area to allow blood and fluid to drain into vacuumed bottles. Even with this care, blood sometimes collects and the breast becomes swollen and painful. A second operation a day or two after the first may be necessary to remove the haematoma.

**Infection** – You will be given one dose of a strong antibiotic at the time of the operation to prevent any infection. There are two types of infection. A wound infection may occur after this surgical procedure, which will be treated with antibiotics. If an implant infection occurs it will be necessary to remove the implants. Unfortunately, you will not be able to have these replaced immediately and will need a further operation approximately 6 months later. Any operation that involves a general anaesthetic carries a small risk of a chest infection, particularly if you smoke or vape.

Take special precautions around pet animals at home as there is anecdotal evidence to suggest that there is cross-infection with pets. Please do NOT allow pets into your bedroom, and ensure sheets are clean especially on the day you return from hospital.

**Deep vein thrombosis** – a blood clot in the legs. This is a potential complication following surgery and bed rest. People who are taking the oral contraceptive pill or hormone replacement therapy and those who smoke are

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at the greatest risk. Occasionally clots can break off and pass into the lungs, known as a pulmonary embolus. All patients are given compression stockings/socks, to try to prevent this problem.

**Scars** – Any operation will leave a permanent scar. Infection can cause the wound to re-open. This may lead to problems with the scar formation such as stretching or thickening. Even without any problems, the scar, at first, will look red, slightly lumpy and raised. Regular massage of the scar with a light non-perfumed moisturising cream and using sensible sun protection measures, such as a factor 50 sun block, should help it to settle in time and fade over some months. This may take up to two years. Some people may be prone to the development of keloid or hypertrophic scars which are raised, itchy, and red. If you tend to produce scars like these, please discuss this with your surgeon.

**Nipples** - As a result of the surgery, there may be a decrease in or loss of nipple sensation. Occasionally, the nipple sensation will be increased for a period of three to six months following surgery and may be painful.

**Breast-feeding** – The implants should not interfere with the ability to breast-feed. However there has been evidence which suggests that the amount of milk produced may be reduced in some women. Breast shape will alter after pregnancies and breast-feeding.

**Symmetry** – Although every effort will be made to make your breasts equal in size and shape, you may find that there is a small difference between the two breasts. This is quite normal, but if you have any concerns or questions please talk to the surgeon.

# What can I expect before my operation?

An anaesthetist will visit you and examine you on the ward and explain the anaesthetic procedure. Miss Hazari will see you and ask for your consent to proceed with your surgery and may do pre-operative photographs. She may mark your breasts where the implant will be placed. Please ask questions if there is anything that you are not sure about. You must have nothing to eat for a minimum of six hours and nothing to drink for a minimum of two hours before your surgery. This is for your safety, to prevent any problems during your anaesthetic.

#### The surgery

Techniques for breast augmentation vary, depending on the surgeon and your body shape. Miss Hazari uses the most common procedure which involves making an incision in the crease under the breast then making an envelope to put the implant in. The implant can be placed either behind the muscle/ dual plane or in front depending on what you have decided with your surgeon. The

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stitches are usually hidden under the skin and do not need to be removed afterwards. The scar may be sutured to the infra-mammary crease on the chest wall to stabilise it in the long-term, it can occasionally give rise to dimpling in the scar. This tends to resolve by 3-4 months when the sutures dissolve. You will be given an appointment for our dressing clinic.

# After the operation

The procedure usually takes about one to one and a half hours. When you wake up after the surgery, you will be in the recovery area. The nursing staff are very experienced and they will ensure that your recovery is as pain-free as possible. Painkillers will be given to you on a regular basis for as long as you need them. The operation does not usually cause much pain afterwards, although tightness and bruising may cause discomfort. Please tell the nurses if your pain persists.

#### **Drains and Dressings**

Drains, if inserted into the breast at the time of surgery, are to allow any fluid to drain away. The drainage tube is attached to a vacuumed bottle where the fluid is measured. The nurses remove them, on the doctor's instructions, usually after 24 hours, depending on the amount and colour of the fluid drained. Following removal, a small amount of leakage from the wound is common. A light dressing can absorb this. Waterproof dressings may be used to keep the drain-sites clean and dry. The operation wounds will be covered with steristrips and a splash-proof dressing. Do not get the dressing wet for 7 days after surgery, or preferably until you have been seen for the first dressing appointment. The dressing will be changed to micropore tape at the first dressing change, following which you can shower. You must dry the tape with a hairdryer on cold setting. Do not leave the tape damp as it will make the wound underneath soggy and infected. Do not immerse in a bath as the wounds can get infected.

#### Bra

You will need to wear a front-fastening, non-wired, support / post-surgery bra continuously following surgery, as advised by your surgeon, as this will help with reducing the swelling and help the breasts settle into their new shape. Wear for up to six weeks for 23 out of 24 hours per day (including night-time), taking off only for showering/washing. This is to help support the underlying tissue and suture lines while healing.

After surgery, you can expect to find some swelling and your breasts will seem high and firm which may seem unnatural to you. However, after a while the swelling will reduce and become more comfortable, and the breasts will take on a more natural shape. You must not lift heavy objects or play any strenuous sports for the first two to three weeks.

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Breast firmness and tenderness is common in women and can relate to your monthly periods. After your breasts have healed, these symptoms may return. It may take some months for the scar tissue to settle and at first your breasts may feel lumpy and tender.

# What should I do when I get home?

You should be able to return to most of your normal activities within two to four weeks after your surgery, although this will vary from person to person. We recommend that you build up gradually to more strenuous tasks such as housework or gardening. You may need to ask someone to help you for the first couple of days as it is important that you get plenty of rest and that you set aside some time during the day for this. Don't be afraid to take some 'time out' for yourself to rest your mind and body.

# Returning to work

Depending on the type of work that you do, you may be able to return to work within two to three weeks. You may feel quite tired at first. This is quite normal, and we suggest you talk to your employer about making a gradual return to work.

#### **Sport**

Many sports can be resumed within a couple of weeks, but we suggest that you check with your surgeon or breast care nurse first. If the sport involves strenuous upper body movements, for example aerobics, golf, swimming and any racquet sports, it is probably advisable to recommence these activities gradually about 8 weeks after surgery.

**Sexual activities -** Initially your breasts will feel tender and you may not feel up to physical contact. However, you may resume your sex life as soon as you feel comfortable.

#### What should I look out for?

Once you are at home after surgery, it is important to check your wounds. We also advise that you carry out normal breast checks and become 'breast aware' – by getting to know what your breasts look and feel like so you know what is normal for you.

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If your breasts become red, swollen and painful or there is a discharge please contact the hospital immediately.

# Follow-up appointments

On the day you go home you will be given an appointment to see Miss Hazari a week to 10 days after your surgery; this is to make sure everything is settling down.

# **Breast screening**

Continue breast self examination and you will soon get to know how your breasts feel. If you should notice any changes inform your GP. It is important to tell the radiographer when having a mammogram that your breasts have been augmented and the type of implant used, as the screening technique may need to be adapted to show as much of the breast tissue as possible.

#### Notes...

Any questions you may have.