

This guide is intended to help you select your implant type, shape and size. I hope you find it useful but if you are uncertain or need a little more information then please do not hesitate to contact me. If you are reading this before your consultation, then it is often useful to write down any questions you have and bring them with you, so that you don't forget on the day.

What are implants made of?

The outer layer, or shell, of all implants is made of silicone. Some implants have an additional polyurethane coating.

The shell can be filled with either silicone gel or saline. Silicone filled implants are the standard implants used by most surgeons. Silicone has been used for many years in a variety of medical devises. It is present in heart valves, indwelling catheters and baby bottles. Even saline implants have a silicone outer shell. Due to its smooth and soft structure, silicone implants feel more natural, with most patients and surgeons express a preference for them. They are also available in a range of shapes as they are cohesive and not liquid, meaning that they will maintain their shape in all positions. Silicone implants are often described as 'gummi bears' so even when they rupture, they will maintain their shape and volume and do not deflate. For that reason, it is recommended that implants are checked with an ultrasound after 5 years, as most patients do not notice if the implant has ruptured. In contrast, saline filled implants tend to feel less natural, folds or ripples may be more visible, and they have a risk of deflation.

What are the different shell characteristics?

Implant shells can be smooth, textured or microtextured. When implants were first made, they all had a smooth shell. With smooth implants, the outer shell is shiny and slippery, so the implant doesn't attach to the surrounding tissue. This means that they can move around easily and may not stay in their intended position. With a textured implant, the outer shell has a more pebbled, rough texture. This type of implant attaches to the surrounding tissues and is less likely to move around. For this reason, shaped implants must be textured to maintain their position without flipping over into an abnormal shape.



One potential complication after a breast augmentation is **capsular contracture**. Capsular contracture occurs when the tissue that surrounds the implant hardens and tightens, making the breast look abnormal and potentially become painful. Researchers created the textured implants based on finding that textured implants decrease the risk of capsular contracture.

Unfortunately, it has subsequently come to light in the past decade that textured breast implants, particularly those with a coarser texture, have been linked with a rare type of cancer that develops in the capsule of scar tissue around the implants. This type of cancer is called a **Breast Implant Associated Anaplastic Large Cell Lymphoma (BIA-ALCL)**. It is a lymphoma and not related to breast cancer itself, but it is malignant. It is difficult to know the exact incidence but up to 2018, there were 414 reported cases of BIA-ALCL and 16 confirmed deaths worldwide from BIA-ALCL.

I searched for an implant option which is not associated with BIA-ALCL but does not have increased risks of malposition and capsular contracture that smooth implants do. Fortunately, there is a third type of implant – **micro/nano textured implants**, which have these characteristics without the BIA-ALCL concerns. I recommend **Motiva® SmoothSilk™** implants which are silicone fill with a 'micro' textured shell. Technically they are classified as smooth implants, but they offer the same benefits as textured implants in reducing the capsular contracture rate. So far, they have never been associated with ALCL, although it is impossible to say that this will never happen.

Implant size

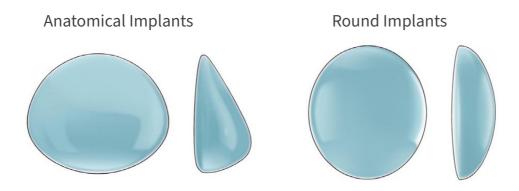
The most important factor in assessing which size of implant you want is how it looks on you. The same implant often looks different in different patients, as it depends on their body shape and current breast volume.

Once you have decided what size implant you want, the projection is pre-determined by the width of your breast. For a given volume, a patient with a wider breast will have a less projecting implant than a patient with a narrower breast. It is not possible to guarantee a cup size as cup sizes depend on the bra manufacturer and there is no set standard.



At your preoperative consultation, I will help you select the correct size and shape of implant. Using simulation software, I can create a 3D image so you can see yourself and compare simulations with what you may look like after surgery. You will then be able to use the sizing kit to confirm this.

Implant Shape



Implants can be **round** or **anatomical**. Round implants are like a hemi-sphere, which gives fullness in the upper pole of the breast. Anatomical implants are teardrop or pear-shaped, which carry most of the volume at the base of the breast with a fatter upper pole.

Teardrop shaped implants are said to give a more natural contour to the breast, particularly in patients with little breast tissue. However, they are more expensive, and they have the potential to rotate. It is therefore only possible to get textured implants in an anatomical shape. They are also firmer, and the upper edge may be visible or palpable.

Recent studies have shown that most of the time surgeons and patients cannot tell whether round or anatomical implants have been used.

For most patients, a round implant is more suitable. These implants come in different profiles or projections (meaning how large they are from a side on view) and this dictates how much fullness they give in the upper part of the breast.

Some patients need to have fullness restored in the upper part of the breast if the breast volume has descended, whilst others prefer more fullness, to give a more pronounced



cleavage. If a round implant rotates in its pocket, there will be no visible change to the breast.



I hope you find this information useful. If you have any questions or require a little more information, then please do not hesitate to contact me.

Anne Dancey

Dr Anne Dancey

 $Plastic\ and\ Reconstructive\ Surgeon\ FRCS(Plast),\ MBChB(Hons),\ MmedSci(Hons)\ and\ MCh(PASP)$