Breast implants and your health

Summary

- Complications of breast implants can include swelling, scarring and rupture or leakage of implants.
- Major studies have found no evidence of a link between silicone breast implants and an increased risk of illness, including breast cancer.
- Both saline and silicone-filled breast implants are approved for use in Australia.

Breast implants are used to enlarge breasts or reconstruct breasts after mastectomy, or for cosmetic or other reasons. Complications can occur with all forms of breast implants, and may include scarring, swelling, rupture and leakage. However, despite a lot of controversy in the 1990s, there is no evidence to link silicone filled implants with cancer or autoimmune diseases.

Most implants have a silicone outer shell, but some are covered with polyurethane (a synthetic material similar to plastic and rubber). Implants can be filled with saline (salt) solution, silicone gel or (rarely) an alternative such as soya oil.

Safety of approved breast implants

The Therapeutic Goods Administration (TGA) is the Australian Government body responsible for approving the use of medical devices and medications. The TGA has approved certain varieties of both saline and silicone filled implants for use in Australia.

Breast implants are also available in a variety of shapes, including round and teardrop. If you plan on breast augmentation (breast enlargement) surgery, you should try to find out as much as you can before you make a decision to have breast implants.

Silicone breast implants and serious illness

The use of silicone implants in Australia was once restricted. In the 1980s, concerns were raised that silicone leaking from breast implants may be linked with an increased risk of a range of conditions, including autoimmune disorders and cancer. The most commonly reported condition was scleroderma, a thickening and hardening of the skin and other connective tissues.

Extensive reviews have established no evidence linking silicone breast implants to cancer or autoimmune disorders such as scleroderma, rheumatoid arthritis or systemic lupus erythematosus (SLE).

In June 2001, the TGA approved certain varieties of silicone breast implants for use in Australia.

Complications with breast implants

There is strong evidence that both saline and silicone breast implants may be associated with local complications including swelling and leakage. The surgical procedure to insert a breast implant will also leave a scar.

Breast implants are not designed to last a lifetime and may eventually need to be removed or replaced. The risk of complications increases as the implant ages. Reported complication rates in Australia are similar for both saline and silicone filled implants, but are higher for women having a post-mastectomy reconstruction. This may be because people requiring a mastectomy often require radiotherapy, which affects the elasticity of the chest skin.

Some of the known and documented complications of breast implants, whether silicone or saline, include:
- infection
- permanent scarring, including keloid (thick or raised) scarring
- capsular formation and contraction, in which an envelope of scar tissue develops around the implant

betterhealth.vic.gov.au
- implant rupture or leakage
- sensation changes to the breast and nipple
- implants that move out of position.

**Capsular formation and contracture**

The body’s normal response to a foreign body (such as a breast implant) is to form a shell or capsule of scar tissue around it. This scar tissue may tighten or contract and can cause:

- hardening of the breast
- pain
- sensitivity to touch
- wrinkling or distortion of the breast
- movement or displacement of the implant.

Capsular formation and contracture is the most common local change after implantation. This can occur weeks or years after implantation. Surgery to break or remove the scar capsule is called a capsulotomy.

**Rupture and leakage of silicone implants**

Silicone breast implants may rupture (break) or diffuse (leak or sweat – this is rare with recent, improved implants).

Problems may occur as a result of:

- capsular formation and contraction
- injury
- deterioration of implant due to age
- mammography (breast x-ray).

Newer implants are designed to keep silicone inside the implant, even if a rupture or diffusion occurs. However, in some cases, silicone gel can move out of the implant and into breast tissue or (rarely) nearby lymph nodes.

Some people notice no symptoms when an implant has ruptured or diffused. However, possible symptoms include:

- lumps in the breast
- decreased breast size
- distorted breast shape
- asymmetry (different sized or shaped breasts)
- pain or tenderness.

All humans carry silicone in their bodies. Some laboratories claim they can test for the presence of silicone in the blood and urine, but these tests can only show the total amount of silicone in the body.

Mammograms, ultrasound scans and magnetic resonance imaging (MRI) scans can be used to detect problems with implants, but they do not always show if an implant is leaking. This is because the tiny drops of silicone can be too small to register. The only way to know for sure if an implant is leaking is by undergoing surgery.

**Granulomas**

Sometimes, leaked silicone accumulates in the breast tissue or moves to the lymph nodes in the armpit through the lymph vessels. Little lumps of silicone surrounded by inflammatory tissue, called granulomas, can then develop. These granulomas are not cancerous, but any lumps must be examined by your doctor or surgeon.

**Mammograms and breast implants**

Women with breast implants should attend breast screening for cancer as routinely recommended for all women. A mammogram is performed by gently pressing the breast between two plates, then taking an x-ray. It is important to tell the radiographer that you have implants, as some minor changes to the screening technique may be required.
If the radiographer performs the scan in the usual way, the pressure might split an implant or squeeze more silicone into the surrounding breast tissue if the implant is already leaking.

**Breastfeeding with implants**

There have been concerns that silicone may be passed to breastfeeding babies. An American study in 1999 found that there is no established risk to the breastfeeding babies of women with silicone implants. However, some women with implants find that breastfeeding is more difficult due to the altered shape of the breast or nipple.

**Where to get help**

- Your doctor
- **Australian Society of Plastic Surgeons** Tel. (02) 9437 9200
- **Australasian Foundation for Plastic Surgery** Information Hotline Tel. 1300 367 446
- **Royal Australasian College of Surgeons** Tel. (03) 9249 1200
- **Australian Health Practitioner Regulation Agency** Tel. 1300 419 495
- **Therapeutic Goods Administration** Tel. 1800 020 653