Breast implants and your health

Breast implants are used to enlarge breasts or reconstruct breasts after mastectomy. Implants can be filled with saline solution, silicone solution or an alternative such as soya oil. Complications may include scarring, swelling, rupture and leakage, and can occur with all forms of breast implants. However, despite a lot of controversy on this issue, there is no evidence to link silicone-filled implants with cancer or autoimmune diseases.

The Therapeutic Goods Administration (TGA) is the Federal Government organisation 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 shapes.

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

Complications and leakage can occur
There is strong evidence that both saline and silicone breast implants can cause local complications including swelling and gel leakage. Breast implant surgery also creates scarring.

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 mastectomy patients. This may be because mastectomy patients are often older and the skin surrounding the implant is thinner.

Complications
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 (an envelope of scar tissue develops around the implant)
- Implant rupture
- Sensation changes to the breast and nipple
- Implants that move out of position.

Capsular formation and contracture
Both silicone and saline implants can cause swelling in the breast area. The body's normal response to a foreign body (such as a breast implant) is to form a shell or a capsule of scar tissue around it. This scar tissue may tighten or contract and can cause:

- Extreme hardening of the breast
- Pain
- Extreme 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. Other less common results of capsular contracture are increased gel diffusion or rupture of the implants.

Silicone implants - rupture and diffusion
Silicone breast implants may rupture (break) or diffuse (leak or sweat). This may happen 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 nearby lymph nodes.

Detecting leaked silicone
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 elemental silicon. They cannot distinguish between elemental silicon, which occurs naturally in the body, and silicone which may be from breast implants.

Mammograms, ultrasound scans and magnetic resonance imaging (MRI) scans can be used to detect problems with implants, but they do not always show whether or not 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 major surgery.

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

Autoimmune disorders
Autoimmune disorders such as scleroderma have been linked anecdotally to silicone breast implants. Three major studies were conducted in Australia and the United States in the 1990s. These studies concluded that women with breast implants were no more likely to develop autoimmune disorders than other women in the population. This means that a woman with an autoimmune disorder would have developed the condition with or without breast implants.

Breastfeeding concerns
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 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
- Your surgeon
- The Australian Society of Plastic Surgeons Tel. 1300 367 446
- Therapeutic Goods Administration www.tga.gov.au.

Things to remember

- 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 cancer.
- Both saline and silicone-filled breast implants are approved for use in Australia.

This page has been produced in consultation with, and approved by:

Better Health Channel

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