INFORMATION FOR PATIENTS

Tissue Expansion

Tissue expansion is one of the ways of achieving breast reconstruction following a mastectomy. It is based on the well known fact that tissue can be stretched, as occurs in pregnancy. Your surgeon will advise you on whether tissue expansion would be a suitable option for you. The procedure can be commenced at the time of mastectomy or as a delayed procedure months or years later.

At operation an empty inflatable silicone bag is inserted under the chest wall muscle. The bag either has a built in valve or a valve that is connected by a tube to allow filling. This valve can be felt under the skin or may require a magnet to locate it.

Once the wound has fully healed a few weeks later, the bag is gradually expanded by injecting a sterile saline (salt) solution into the valve, usually at 1 weekly intervals (sometimes longer). The amount can vary from 30mls to 120mls depending on how much is tolerated. This procedure is performed in the outpatient department and is not usually uncomfortable because of the numbness of the skin following surgery. There may be some discomfort following inflation which usually only lasts for 24 hours, occasionally a bit longer. Any discomfort will respond to mild painkillers. A crop top bra is often the best garment to provide support and comfort during the period of tissue expansion.

The process of expansion can take from around 6 weeks to a few months, depending on how much fluid is tolerated and the desired size. The tissue needs to be stretched to a larger size than is required, so that there is extra tissue to allow a natural droop to be achieved when the expander is removed. The asymmetry can be cancelled with an appropriate choice of clothes.

When expansion is completed the tissues are left to fully stretch over a period of between 6 weeks to a few months. A second operation is then performed and a small part of the mastectomy wound is opened and the expander removed. A permanent breast implant is then inserted. This may require an overnight stay in hospital.

Immediately after the second operation there may be some swelling and a small degree of discomfort. It may take up to six weeks for the swelling to settle and sometimes takes a few months for the implant and tissues to drop into a more natural position. A supportive bra without underwires should be worn for two weeks afterwards, which can be supplied by the ward. Heavy lifting should be avoided for 6 weeks after the operation. Loss of sensation in the skin overlying reconstructed breast may be temporary or permanent.

Potential problems
• Deflation – if the expander is damaged, the saline will leak and be absorbed by the body. The saline solution is harmless, but surgery is required to replace the expander.

• Tissue Damage – if the overlying tissue is too weak to tolerate the pressure of expansion, tissue damage may occur. This will only occur if expansion is performed against an unstable wound area, or if expansion occurs too rapidly.

• Capsular Contraction – if excessive scar tissue forms around the expander, expansion can become difficult and painful. This is rare with modern expanders, but may require surgery to remove the fibrous tissues.

• Infection – there is a very small risk of this with any operation. Treatment is with antibiotics, but in severe cases removal of the tissue expander may be required.

Combined tissue expander / implant

Tissue expansion can occasionally be achieved by using a combined tissue expander and implant. This is a silicone implant with an inflatable inner chamber. This sort of expander may be left in place for many years.

Saline is used to inflate the inner chamber until tissue expansion is achieved in exactly the same way. Once the tissues have been left to fully stretch for a period, saline is withdrawn via the valve until the desired size is achieved.

The size can continue to be adjusted until the valve is removed at a later date. Removal of the valve is a minor procedure performed under a local or general anaesthetic as a daycase.

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