

Anterolateral free flap (ALT)

An anterolateral free flap is also known as an “ALT flap”. It comprises of skin, taken from the front of the thigh, which can be used to fill a hole which is left when a cancer has been removed. It is one of the ways of replacing tissue in the head and neck.

What does the surgery involve?

Your Surgeon will take a piece of skin and fat from the upper surface of your thigh, which is known as the “donor site”. The skin and fat layer in this region is removed (the flap) along with two blood vessels. One of the blood vessels supplies blood to the flap (the artery) and the other drains blood from it (the vein). Once the flap of skin is raised, it is transferred and sewn into the hole created by the removal of your cancer. The blood vessels supplying and draining the flap are then joined to blood vessels in your neck, under a microscope. These blood vessels then keep the flap alive while it heals into place. The donor site on your thigh is then closed, primarily with sutures (stitches) and sealed with clips. In order to remove any excess fluid or blood from the donor site, a vacuumed drain is likely to be inserted. This will be regularly monitored. The drain will be removed by the nursing staff once the area stops producing excess fluid.

What will my leg be like afterwards?

Your thigh will be bandaged for protection and comfort, and this will be monitored regularly by nursing staff. The dressing will be removed after approximately two to three days once the wound has sufficiently closed. It will then be covered with a waterproof dressing. The clips in the wound will be left in place for approximately 10 days, during which time you can wash the area normally. After 10 days the clips will be removed by one of the nursing staff. In the immediate post-operative period, it is likely that you will find the movement of your leg, from which the flap has been taken, quite

uncomfortable. You will receive regular painkillers. It is generally recommended that only gentle movement is undertaken for the first few days, after which point your Physiotherapist will advise you on an appropriate exercise plan. The operation will leave you with a scar on your thigh and a slight indentation. However, the scar does fade over time, gradually becoming less visible. If scarring is of concern to you, a Camouflage Therapist can help once the wounds have fully healed. Please ask your CNS for details.

What are the potential problems?

There is a wound drain inserted into the donor site at the time of surgery and this aims to remove excess blood from the area. When this is removed you still may get a further collection of fluid, named a seroma which may require further drainage. If drainage is needed, the Doctor can insert a small painless needle to drain the fluid directly from the donor site.

In 2-3% patients, the blood vessels supplying or draining the flap can develop a blood clot. This means that the flap doesn't get any fresh blood or, if the drainage vein clots, the flap becomes very congested with old blood. If this occurs, it usually happens within the first two days and means that you will have to return to the Operating Theatre to have the clot removed. Removal is not always successful and on these occasions the flap 'fails' and an alternative method of reconstruction is sought.