

Medial Sural Artery Perforator (MSAP) Free Flap Surgery

Information for patients



This leaflet has been written to help your understanding of Medial Sural Artery Perforator free flap surgery. If you have any other questions please do not hesitate to speak with your surgeon or Clinical Nurse Specialist (CNS).

What is a Medial Sural Artery Perforator free flap?

A Medial Sural Artery Perforator free flap is also known as an "MSAP flap". Skin is removed from the back of the lower leg and then moved to fill a 'hole' which has been left from having a cancer removed. It is therefore one of the ways we replace tissue in the head and neck area that has been removed.

What does the surgery involve?

- Your Surgeon will take a piece of skin and fat from the back of the lower leg (the calf area), 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 help maintain a good blood supply to the flap to encourage healing.

- The donor site on your leg is then closed, primarily with sutures (stitches) and sealed with clips. Occasionally a graft of skin is used to cover the wound. This can be taken from the same leg.
- 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 following the operation and will be removed by the nursing staff once the area stops producing excess fluid.

What will my leg be like afterwards?

- Your calf will be bandaged for protection and comfort and this will be monitored regularly by the 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 stitches or 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. Sometimes dissolving stitches are used which do not need removal.
- 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 but you will be given regular painkillers to help with this discomfort.
- 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 calf and a slight indentation. The scar does fade over time and will gradually become 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 more information.

What are the possible complications with this type of surgery?

Sometimes a wound drain will also be inserted into the donor site at the time of surgery in order to remove excess blood from the area. When the drain is removed you may get a further collection of fluid, called a seroma, which may require further drainage. In such cases, the doctor can insert a small painless needle to drain the fluid directly from the donor site.

In 2-3% of patients, a blood clot can develop in one of the blood vessels attached to the flap. This can mean that the supply of blood to and from the flap can be stopped/significantly reduced. 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 (more information would be given to you about this at the time)

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