Skin Grafts and Skin Flaps
Procedure information sheet

Skin grafts and flaps are used by plastic surgeons to repair a variety of wounds and to reconstruct areas of tissue loss.

When would a skin graft or skin flap be used?
Once a skin lesion is excised (cut out), it may not be possible to simply stitch the wound closed. This may be due to the size of the wound, the position or the shape. It is then necessary to use either a skin graft or skin flap to obtain closure of the wound. Sometimes the wound can be closed directly, although a flap may be used to improve cosmetic outcome.

Skin graft
A skin graft is detached from one part of the body and moved to another. The skin graft has to get a blood supply from the new position. The blood vessels grow into the graft over 5-10 days. The graft has to be sewed in place for this process (“tule”) to occur.

There are two main types of skin grafts
• A split thickness graft takes only part of the skin thickness, leaving enough skin at the donor site (where the skin was taken from) to heal by itself. This is similar to the healing of a graze. The donor site is carefully dressed until healing is complete.
• A full thickness graft takes the full thickness of the skin so the donor site is usually stitched closed and heals as a normal surgical incision. The skin is taken from a site where there is enough skin to allow this closure.

Skin flap
A skin flap is an element of tissue or skin that is moved without disruption to its blood supply to close or reconstruct a wound. A skin flap differs from a skin graft because it maintains its blood supply. Because the skin flap is usually moved to an adjacent area, the characteristics of the skin are more closely matched.

Large or specialised areas can be reconstructed using flaps containing more than just skin. Muscles, bone, nerves and cartilage may be moved and then function in the new position. When the flap is complex, it may be necessary to re-establish the blood supply using microsurgery to join the arteries and veins.