

Definition

Reconstructive plastic surgery is performed to correct functional impairments caused by burns, traumatic injuries (such as facial bone fractures and breaks), developmental abnormalities, infection and disease, and cancer or tumours. Reconstructive plastic surgery is usually performed to improve function, but it may also be done to achieve a “normal” appearance.



Example of a skin graft

Skin Grafting

Skin grafts can be derived from the recipient or donors. Autografts are taken from the recipient. If natural tissue is absent or deficient, alternatives can be cultured from sheets of epithelial cells in synthetic compounds.

Allografts are taken from a donor of the same species.

Xenografts are taken from a donor of a different species.

What is Reconstructive Surgery?



Surgery on a burn victim

Procedures

The most common reconstructive procedures are tumour removal, laceration repair, scar repair, hand surgery, and breast reduction (in 2012, there were 68,416 performed in the US). Other common reconstructive surgical procedures include breast reconstruction after a mastectomy (removal of the breasts) for the treatment of cancer, surgery for burn survivors, and creating a new outer ear when one is absent from birth.



Microsurgery

Plastic surgeons use microsurgery to transfer tissue to cover a defect when no local tissue is available. Free flaps of skin, muscle, bone, fat, or a combination of all may be removed from the body, moved to another site on the body, and reconnected to a blood supply by suturing (with a needle and thread) arteries and veins as small as 1 to 2mm in diameter.



Saved by a fish?

Doctors in Brazil came up with a pioneering treatment to help burn victims- skin grafts from the tilapia fish (xenograft). Experts say it’s much cheaper to work with than other grafts as tilapia is a common freshwater fish. Before the fish strips are used, the skin is put through a process that removes scales, muscle tissue, toxins and any possibility of transmitted diseases. It also gets rid of the fishy smell.

Source-<https://www.dailymail.co.uk/health/article-4033254/Doctors-using-FISH-SKIN-treat-burn-victims-pioneering-new-treatment-heal-wounds.html>