The movie is nearing its end. The heroine has finally found her hero after innumerable struggles and is eager to run into his arms. But wait! There enters another character looking just like the hero. And he claims he is the original one. The other is actually the villain who has undergone plastic surgery to look just like the hero.

It is a fact that what little most people know about plastic surgery is through movies. And much of this is wrong, creating more myths than clearing doubts.

Well, plastic surgery is that branch of surgery that deals with remodeling, repair or restoration of body parts especially by transfer of tissues. This type of surgery aims to improve as well as restore form and function.

Why is it named Plastic Surgery? The word ‘Plastic’ is derived from the Greek word ‘Plastikos’ which means ‘to mould’ or ‘to give form’. Since surgeons dealing in this branch of surgery often utilized the body tissues by moulding it according to their requirements in order to restore a defect or deformity, this name has stuck.

The roots of plastic surgery have been traced to India to as early as 4000 years ago and the Indian physician Sushruta is widely accepted as the father of plastic surgery. Sir Harold Delf Gillies who was born in New Zealand and later practiced in London has been credited as the father of modern plastic surgery.

Cosmetic Surgery
Plastic surgery in the modern age has diversified into numerous sub-divisions. Cosmetic or aesthetic surgery is the most popular form of plastic surgery. This is because of the glamour and media attention attached to it. Individuals seeking aesthetic surgery do not actually suffer from any disease but need the surgery to improve their appearance. Those for whom their face or bodily appearance is their passport to success, often resort to aesthetic plastic surgery. These are people from the world of media or television or films. In fact, anyone worried about his her public appearance.

Various types of aesthetic surgery are available like rhinoplasty, which is the surgical correction of the nose and otoplasty which involves the correction in the appearance of the external ear. Other aesthetic surgeries include breast reduction in females having inappropriately large-size breasts or breast augmentation in females having small-size breasts.

Hair transplantation is often resorted to by persons with baldness where individual hairs are harvested from the scalp of the patient and applied on areas having little or no hair. Liposuction or removal of fat by applying suction is done in persons with inappropriate distribution or accumulation of fat in the thighs, buttocks, legs, abdomen, arms, etc. In this process fat is removed from

Other subdivisions of plastic surgery include Craniofacial surgery in which plastic surgeons are trained to manage deformities of the face and skull which may be present since birth or following trauma.
Some individuals need surgery of the face to restore a youthful appearance. This is done using a procedure known as face lift where the wrinkles of the face are corrected by tightening the skin surgically or by LASER. Scars over the face and body can be corrected to give a near normal appearance using fine sutures and meticulous technique.

Apart from these, LASER, Chemical peels and Botox (Botulinum toxin) are also utilized during different aesthetic surgery procedures. Orthognathic surgery refers to that subdivision of aesthetic surgery where the appearance of the face is altered to give a better appearance by controlled fracturing of the facial bones.

Reconstructive Surgery
Then there is reconstructive surgery which is performed to correct functional impairments in an individual after accidental or non-accidental trauma, burns, infections or cancers. The aim of reconstructive surgery is to improve or restore function to a body part as well as approximate as normal appearance as possible.

For instance, cleft lip and cleft palate are conditions where a child is born with a defect in the lip and palate. Children with cleft lips appear abnormal and become a source of anxiety for their parents. Such children become subjected to ridicule and insensitive gaze by their classmates and outsiders. Children with cleft palate have a defect inside their mouth due to which they are unable to swallow or speak properly. Reconstructive lip surgery (cheiloplasty) and palate surgery (palatoplasty) is done to improve appearance as well as function in the child. Such surgeries restore the confidence and outlook of these children and in turn help them become more productive to the society.

Cancers have been aptly described as ‘emperor of all maladies’ in a recent prize winning book of the same name. True to their name cancers of the skin and external body parts like eyelids, lip, neck, upper and lower limbs cause a lot of disability and disfigurement. Removal of such cancers leaves behind ugly wounds that have to be covered. Reconstructive surgery is also done following such removal of cancers to restore appearance and function.

Breast reconstruction in females after removal of breast cancer is one such common reconstructive procedure done worldwide. Here the reconstructive plastic surgeon utilizes body tissues known as “Flaps” or “Grafts” for covering such wounds. It is from these applications of body tissues by moulding and remodeling that the term “Plastic Surgery” has been derived.

The widespread evolution of this division of plastic surgery happened during World War I, when the use of artillery produced grotesque wounds and deformities in soldiers. Sir Harold Delf Gillies has been credited with the title ‘Father of Modern Plastic surgery’ for dedicating his time and energy to evolving newer methods of reconstruction during that time.

People who sustain burn injuries due to fire or acids lose large portions of their skins leaving their bodies defenseless against the microbes of nature. In addition, when these wounds heal, they contract and produce bizarre deformities. Plastic surgeons replace the damaged skin with healthy skin harvested from other sites of the patients’ body. This procedure is known as skin grafting. Such reconstructive surgeries are also done in patients having large wounds anywhere on the body following accidents. Reconstruction of the male and female genitalia is carried out in patients with congenital and acquired defects of the genitalia.

Other subdivisions of plastic surgery include Craniofacial surgery in which plastic surgeons are trained to manage deformities of the face and skull which may be present since birth or following trauma. Craniosyostosis is such a condition where the child’s skull appears abnormal due to inappropriate growth. These children are helped by craniofacial reconstructive surgery.
Microvascular surgery is a procedure where plastic surgeons use microscopes to operate upon small blood vessels and nerves to reconstruct a particular defect. Amputation of the hand is a situation where microvascular plastic surgeons reattach the amputated part to the upper limb by connecting the blood vessels, nerves and tendons under a microscope.

Hand surgery is a subgroup of reconstructive plastic surgery where the plastic surgeons utilise their expertise to correct deformities of the hand in patients to restore a near normal appearance and function. This is significant since the hand is a source of livelihood for the individual be it a guitar player or a manual labourer.

Leprosy or Hansen’s disease is a condition where the nerves of the hand are affected resulting in gross deformities. Such deformities are corrected by the hand reconstructive surgeon using procedures known as ‘tendon transfers’. Nerve and vascular grafts are done in situations involving the destruction or loss of nerves and vessels of the limbs.

Most of these subdivisions are interrelated and need interdisciplinary skills. For example, a patient needing breast reconstruction following removal of breast cancer will require a microvascular procedure to attain a perfect result. Hence, most plastic surgeons presently designate themselves as plastic and reconstructive surgeons.

Plastic surgeries can be gender specific. Breast augmentation and reduction procedures are obviously requested by females while males may seek treatment for gynecomastia which is a condition where males have breasts like females. Such condition is treated by Liposuction. Some patients, due to their genetic predisposition, undergo sex change surgeries. Phalloplasty is the creation of a penis in a person who desires a male phenotype and vaginoplasties are done in individuals desiring a female phenotype.

Risks & Complications
Plastic, cosmetic and reconstructive surgeries like all other surgical procedures have their own risks and complications. The complications may range from patient dissatisfaction to frequency of procedures.

The usual complication associated with cosmetic surgery is patient dissatisfaction. This is due to the fact that some individuals may have an unrealistic expectation from the surgical procedure. For example, a patient seeking liposuction for body fat may be expecting dramatic changes in appearance following surgery although this is rarely so. Similarly a patient seeking cosmetic correction of the nose (rhinoplasty) may actually be dissatisfied with the new appearance. In such situations revision surgery is difficult.

Apart from these, infections may occur in situations where implants have been used in breast augmentation and are mostly distressing and sometimes require removal of those implants. Recently there has been news of the use of faulty silicone breast implants which have a tendency to rupture. These ruptures would necessitate removal of the implant in addition to causing distress and deformity to the patient. Fortunately use of such implants have been banned by the food and drug administration (FDA) USA.

Because of the inherent nature of these surgeries, excessive blood loss, unsightly scars and patient mortality as seen in other surgeries is rarely seen here. However, reconstructive surgeries may be associated with infection, prolonged immobilization and subsequent stiffness in the limbs especially following hand surgeries. Reconstructive surgery as in burn patients may require frequent sittings and operative procedure to get a final aesthetically acceptable result.

Flap procedures as in microvascular surgery may be subject to failure following obstruction to arterial and venous flow to the flap. In such situations a revision procedure may be needed. Nevertheless the incidences of complications are low relative to the magnitude of the surgery. While longer and bigger surgeries have a higher incidence of infection, smaller procedures have fewer or even no complications. In general, the long term results of such surgeries have been found to be satisfactory and without any after effects.

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