A Detailed Note on Hand Surgery and its Types

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Description
Hand surgery is a broad phrase that encompasses a wide range of operations. Hand surgery is performed by plastic surgeons with the goal of restoring hand and finger function. Hand surgeons, on the other hand, strive to make the hand appear as normal as feasible. Hand surgery treats injuries and infections in the hand and upper extremity (often from the tip of the hand to the shoulder) using both surgical and non-surgical methods. Graduates of general surgery, orthopaedic surgery, and plastic surgery can practise hand surgery. Chiroplasty, sometimes known as cheiroplasty, is a type of hand plastic surgery. The hand can be subjected to a wide range of procedures. It all relies on what's causing the problem in the first place. These procedures include.

Skin grafts
Skin grafts for the hand entail restoring or connecting skin to a missing area of the hand. Fingertip amputations or injuries are the most common reasons for this operation. Skin grafts are performed by attaching a healthy patch of skin from another part of the body, known as the donor site, to the wounded area.

Flaps of skin
Skin flaps for the hand, like skin grafts, involve the removal of skin from another region of the body. This treatment, however, employs skin with its own blood supply. Because the skin portion chosen contains the underlying blood veins, fat, and muscles, this is the case. When there is a lack of blood flow in an area where skin does not have a good blood supply. This may be because of the location, damage to the vessels, or extensive tissue damage.

Closed reduction and fixation
This can be utilised if a part of the hand, such as the fingers, has a bone fracture or broken bone. This procedure realigns the broken bone and then immobilises it to allow it to recover properly. Internal devices, such as wires, rods, splints, and casts, can be used to immobilise the body.

Tendon repair
Tendons are the connective tissue that connects muscle to bone. Because of the nature of the tendon, tendon repair in the hand is a complex procedure. Infection, trauma, or a sudden rupture can all cause tendon damage. Tendon repair can be classified as main, delayed primary, or secondary. Acute or abrupt injuries are frequently repaired within 24 hours of the occurrence. The damage is usually treated with a direct operation. Delayed primary repair is done a few days after the damage, but while the wound still has an opening in the skin. Secondary repairs can take 2 to 5 weeks, or even longer, depending on the severity of the injury. Tendon grafts are one option. This is when the injured tendon is replaced by tendons from other parts of the body. Other, more complicated processes may be utilised as well.

Nerve repairs
The nerves in the hand might be damaged by an injury. This might result in a loss of hand function as well as sensation in the hand. Some nerve damage may be self-healing. Others could need surgery. Surgery is usually performed 3 to 6 weeks following the injury. This is the optimum time to restore nerves that have been connected to other, more serious ailments.

When nerve damage is not associated with more serious injuries, surgery to examine the injured nerve is usually performed immediately after the incident. This raises the likelihood of a complete recovery. If a nerve is severed or cut, it can be repaired by reattaching it to the opposite end.

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of the nerve or a nerve graft may be done. This involves replacing the damaged nerve with nerves taken from other areas of the body.

**Fasciotomy**

This operation is performed to aid in the treatment of compartment syndrome. Swelling and increased pressure in a small region, or compartment, in the body causes this painful ailment. An injury is frequently the cause of this. This pressure can obstruct blood flow to the body's tissues, impairing function. A compartment syndrome in the hand can result in acute discomfort and muscle weakness. It can produce a change in the colour of the fingers or nailbeds over time. For a fasciotomy, your doctor will make a cut or incision in your hand or arm. This relieves pressure, allows muscular tissue to enlarge, and improves blood flow. Any tissue that has already been injured inside the area may be removed at this point. This technique protects the damaged hand from further injury and loss of function.