Bone Structure Metallic Grafting and Replacement

Designer: Lorath Psionics House Medical Division in cooperation with Lorath Shaman House.

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Technical Information

Advanced surgical techniques would be used to grafting metallic supports to bones or replace bones all together. The method of this technology when used to graft metals to the bones of the subject is to place porous pieces of supporting metal to the intended bones, the pores in the metal will allow for nutrients to pass to the original bone, and allow the marrow inside of the bone to release its blood. The process of grafting the metal to the bone is extensive, first the subject's skin would have incisions placed along the length of the limb or other part that is to be modified, after the incisions are completed the muscle tissues in the area would have electrical currents passed through them at the proper frequency to cause them to become very loose and relaxed thus allowing them to be moved out of the way of the graft. The graft is accomplished by treating the bone with a specially formulated glue-like gel; after the gel is placed directly upon the bone, small metallic plates are carefully placed upon the gel and the gel holds the metallic plate in place. After each plate is in place in the graft area another gel is put into place, this gel is comprised of a complex calcium solution that then forms between each metallic plate and over each plate thus holding them in place against the bone and over time the natural development of the bone will incorporate the plates into the bone structure. The plates are put into place to prevent the severing and breaking of limbs in combat. The bone replacement process is carried out in the same manner as the grafting process in the beginning, after the incisions are in place and the muscles are moved the process differs. When the bone is exposed it is then removed carefully as to not harm the blood vessels and muscle structures. After the bone is removed it is then replaced with a carbon composite bone constructed with a series of pores, before the carbon-bone is placed into the intended area the carbon-bone is injected with the marrow from the original bone. When the carbon-bone is prepared it is then placed into the spot that the original bone occupied. When the placement is

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completed the muscles and skin are placed back into their proper locations. The carbon composite bones are intended to be stronger than diamond and allow for the subject that the bones are implanted in to endure cutting damage, crushing damage, and impact damage much greater than normal bone structures, yet at the same time be incredibly light.

WARNING:

Even if you did coat the bones with Teflon it is still incredibly likely that being struck by any serious amount of force would cause the small bits of bone growing into the pores or around the plates to fracture or break off entirely. The small fragments would likely then enter the blood stream or something to that effect and move around causing serious injuries to the internal bits of the leg or moving upward to the heart or even up to the brain to cause a stroke.

Old Version Restored by order from Wes.

OOC Notes

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