Hemi intramedullary rods - 1957

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Technology description

Market Opportunities

In the instance of compound fractures, orthopedists will wash the soft tissue and bone and apply external fixators to the bones. External fixators are temporary and are used to stabilize the bones until the chance of infection has passed and the intramedullary rods can be inserted. Unfortunately, these are very expensive and cumbersome to the patient. There is also a chance of additional fracture and infection due to the pins in the bone. This invention serves to ameliorate that and therefore has application in the medical device field.

Technology Solution

The hemi rods are placed into the intramedullary cavity of the bone above and below the fracture directly through the open wound. Rods are locked together with a single screw to create a single rod. Additionally, to guard against infection, the rods are composed of part metal and part methylmethacrylate, which is mixed with an antibiotic powder that delivers antibiotics to the cavity of the broken bone.

Application area

medical device; fracture stabilization device; external bone fixation; orthopaedic surgery; fracture; intramedullary fixation rod; extramedullary connector; fastener; field kit; point of care

Advantages

Invention provides bone stability in a cost effective and easier means than current methods. These rods uniquely help guard against infection by mixing antibiotic powder with the cement.

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