Comparative Study of Biological Tibial Fixation Intramedullary Versus Surface Fixation

Thesis

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Abstract

Comparative study in biological fixation of fractur tibia between Minimal Invasive percutaneous plating osteosynthesis and intramedullary nail. This approach is described as ‘biological internal fixation’. It involves the use of locked internal fixators which have minimal implant-to-bone contact, long-span bridging and fewer screws for fixation. Formerly, internal fixation with a plate aimed at absolute stability to avoid micromovement which could result in loosening of the implant and a delay in healing. The new technique of internal fixation, however, seems to tolerate and even require some degree of mobility of the interface of the fracture.

Keywords: Biological- Intramedullary- TARPO- DCS- DVT

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Abbrevation	***Full Term***
LC-DCP	Low Contact Dynamic Compression Plate
PC-Fix	Point Contact Fixators
MIPPO	minimally invasive percutaneousplate osteosynthesis
LISS	Less Invasive Stabilization System
DCS	dynamic condylar screw
TARPO	Transarticular Approach and Retrograde Plate Osteosynthesis
LCP	Locked Compression plate
LISS-PLT	Less Invasive Stabilization System – proximal lateral tibia
AP	Anteroposterior
CBC	Complete blood count
RBS	Random Blood Sugar
PC	Prothrombin Concentration
PT	Prothrombin Time
RTA	Road traffic accident
MCA	Motor car accident
FFH	Fall from height
FTG	Fall to the ground
MBA	Motor bike accident
FDS	Fall down stairs
ATLS	acute trauma life support
DVT	Deep Venous Thrombosis

Introduction

It is study to introduce the concept of biological fixation; internal fixation of fractures has evolved with a change of emphasis from mechanical to biological priorities. More flexible fixation should encourage the formation of callus while less precise, indirect reduction will reduce operative trauma, With comparison between the minimal invasive percutaneous plating osteosynthesis and intramedullary nail.

Aim of work

Change of emphasis from mechanical to biological priorities in internal fixation. More flexible fixation should encourage the formation of callus while less precise, indirect reduction will reduce operative trauma.

To compare results obtained from Minimal Invasive Percutaneous Plate Osteosynthesis and Intramedullary Nail in treatment of fracture tibia.