2- VIII-8
Application of Minimally Invasive Plate Osteosynthesis (MIPO) - Technique and Limitation

ZhongLi Gao, DanKai Wu, JinCheng Wang, Fei Chang

Department of Orthopaedic Surgery, China-Japan Union Hospital of Jilin University, Changchun, China

Bone plating has been used as a method of fracture management for many years. Recently, a trend toward the use of fracture fixation techniques which preserve the local fracture environment, known as biological osteosynthesis, has evolved. This trend has resulted in the development of a less traumatic method of bone plating referred to as minimally invasive plate osteosynthesis, or percutaneous plating. During MIPO fracture stabilisation, plates are inserted through short incisions and a communicating epiperiosteal tunnel. Typically, bone plates applied in this fashion have a bridging function. For implants with LCP technology all current types of screws can be used and/or combined. However, the treating surgeon is still confronted with the decision which fixation mode, absolute or relative stability, is required for each individual fracture. Moreover, reduction techniques, intra-operative imaging and the biomechanical features of the selected implant require a more meticulous preoperative planning. Minimizing the surgical trauma has resulted in decreased complication rates of problematic fractures. However, the particular inherent risks of a closed procedure have to be evaluated for each body region to avoid severe complications.