

## **L-T2.2 The acute correction of deformities of the tibia with tibial nail using the new Monobloc Distal Bolt Locking Screw (MDBLS)**

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**Introduction:** The main purpose of deformity correction in congenital or acquired deformities of the tibia is achieving normal mechanical and anatomical axis, providing painless and functional limb. The result of the newly designed tibia intramedullary nail presented here allows immediate movement after surgery through its stable distal locking with MDBLS system acute correction. **Materials and Methods:** We present a retrospective review of 5 patients who underwent osteotomy with application of the Monobloc Distal Bolt Locking Screw tibial nail (TST). 5 patients (4 males, 1 female; mean age: of 35.4 range 17 to 57 years). The primary outcome was change in preoperative to postoperative distal and proximal tibial joint orientation angles. No additional fixation, all patients were able to move after surgery. The clinically results were evaluated in AOFAS and Knee Society Score. **Results:** In all cases, correction was applied mechanical axis reached normal limits by acutely. Complete consolidation was achieved in all osteotomized segments. Recurrence was not seen in patients. Average follow-up time was 15 months (range 12 to 20 months), healing was 8 weeks (range 9 to 16 weeks). No patients had non-union, deep infection or implant failure. **Conclusion:** Tibial deformities are treated surgically with different implants. We used tibial nail for its distal locking screw which provides stable locking in all plans achieving maximum resistance against the axial loading, rotation, translation and angulations forces in osteotomy line. The newly designed tibial nail we applied tolerates immediate movement unlike the traditional locking intramedullary tibial nail.