

Study of Ender's Nailing in Paediatric Tibial Shaft Fractures

Dr. Himanshu G. Ladani¹

ABSTRACT

Background: Closed reduction & plaster is standard and effective form of treatment in majority of paediatric tibial shaft fractures. Operative intervention is necessary in unstable fractures, open fractures, poly trauma patients and compartment syndrome or severe soft tissue compromise. Historically, external fixation and plating were the treatment options available, but having complications like infection, overgrowth and refracture. Reamed locked intramedullary nails pose unnecessary risk to the proximal tibial growth plate. Flexible intramedullary nailing in long bone fractures in children has gained wide spread popularity because of its clinical effectiveness & low risk of complications. **Methodology:** This is a study of 15 patients of unstable tibial shaft fractures in children treated with Ender's nailing. 12 were closed & 3 were open grade I fractures with only punctured wounds. Age was ranging from 7 to 16 yrs. There were 8 middle third, one upper third and 6 distal third shaft tibia fractures. In all patients 3.5 Ender's nails were used, two nails in 11 patients and three nails in 4 patients there was no post-operative wound infection. Average operative time was 40 minutes and average blood loss was 35 cc. **Results:** Average union time was 9 wks. All fractures united without 2nd operative intervention. In 2 patients there was some proximal migration of nails causing some knee irritation. In all patients implant removed 6 to 7 months after surgery. At final follow-up there were full knee & ankle movements. 2 patients had more than 5^o malalignment in A-P or M-L plane. No rotational deformity, no limb length discrepancy or physical arrest. **Conclusion:** Ender's nailing is an effective method of treatment in these cases, which allows rapid healing of tibial shaft fractures with an acceptable rate of complications. There is short learning curve with this treatment and implants are inexpensive.

Key Words: Paediatric tibial shaft fractures, Ender's nailing, Closed reduction

Author

¹Ex. Assistant Professor of Orthopaedics, M.P.Shah Medical College, Jamnagar, Gujarat.

Author for correspondence:

Dr. Himanshu G. Ladani, Ladani
Orthopaedic Hospital, Natraj chamber,
opp. Sankalp complex, Sardarbaug road,
Junagadh, Gujarat. 362001. Mail- himanshuladani@gmail.com