Intramedullary nailing of pediatric femoral fractures.

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Abstract

This retrospective study reviews our results with intramedullary nail fixation of 37 fractures of the femur in 35 skeletally immature patients. Five of these fractures were open. Twenty-two patients (average age 12 + 9 years) were treated with reamed intramedullary nails. Fifteen patients (average age 9 + 6 years) were treated with nonreamed nails. All fractures united in 6-12 weeks. There were no infections, delayed or nonunions, nor were there any incidences of avascular necrosis. There were very few significant complications. One patient required excision of heterotopic bone to restore hip motion. When surgical treatment of pediatric femur fractures is indicated, we prefer intramedullary nail fixation (either reamed or nonreamed) depending on age, fracture pattern (level, degree of comminution), and size of femoral canal. Experience and careful surgical judgment are required to appropriately individualize treatment for these patients.