

The Dilemma in Managing Femur Fracture in an Obese Pregnant Lady: A Case Report

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INTRODUCTION:

High-energy trauma causing femoral diaphyseal fracture is common. Based on fracture location, displacement, comminution, and soft tissue condition; intramedullary nails, plates, and external fixators are used as treatments. Most diaphyseal fractures are treated with intramedullary nailing, which has good clinical results.

REPORT:

A thirty-two-year-old woman in her first trimester had right thigh pain and deformity after a car accident. The right femur radiograph showed a transverse midshaft femur fracture with minimal comminution. The dilemma arose in determining the best type of fixation for an obese pregnant lady. Following a thorough multidisciplinary discussion, the decision to plate the right femur was made. The rate of radiation exposure during the first trimester of pregnancy, soft tissue management when operating on an obese patient, and the best fixation for treating diaphyseal femur fracture in an adult are all considered. Patient underwent open reduction and plating of the right femur. Intraoperatively, a fat layer of 10 centimeters thick is noted in between the skin-fascia layer. Adequate fracture reduction was achieved under direct visualization. To reduce radiation exposure, no x-rays were taken post-operatively. Clinic follow-up showed the patient was doing well. X-ray was performed in the third trimester. The x-ray showed potential fracture healing with evidence of a callus formation.



Figure1: Clinical images



Figure2: X-ray

CONCLUSION:

Trauma management in obese pregnant patients is challenging. Intramedullary nailing is the best femur diaphyseal fracture treatment. However, the risk of radiation in the first trimester of pregnancy needs to be considered. In this report, by performing plating femur risk of intraoperative radiation exposure had been eliminated. However, the risk of wound breakdown and implant failure when performing plating femur in obese patients was taken. Fortunately, a potential fracture-healing outcome is obtained.

REFERENCES:

1. Rathor et al., Effective Treatment of Femur Diaphyseal Fracture with Compression Plate – A Finite Element and In Vivo Study Comparing the Healing Outcomes of Nailing and Plating. Indian Journal of Orthopaedics. 2023;57(1):146-58.