

Intramedullary Nailing In Obese Patient: A Humongous Challenge

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INTRODUCTION:

Obesity is a health issue of increasing prevalence not only in Malaysia but worldwide.(1, 2) Given the continuous rise of obesity, femoral fractures are likely to become even more frequent. However there remains a scarcity of literature on intraoperative experiences and management of femoral fractures in the obese population. The aim of this case report is to report the challenges that we met with intramedullary nailing of a morbidly obese patient.

MATERIALS & METHODS:

A 29 years old morbidly obese gentleman with a body mass Index of 58 was involved with a motor vehicle accident and had sustained a closed segmental fracture of his left femur. He was managed preoperatively with skeletal traction and adequate limb and chest physiotherapy. Retrograde intramedullary nailing was undertaken after 10 days of admission. The surgery was uneventful and post operatively he was discharged home after 3 days.

RESULTS:

Post- operatively aggressive rehabilitation was undertaken. His fractures united uneventfully at 6 months and he obtained good function with no complaints of knee pain or stiffness. However shortening of 1 cm of the affected limb was recorded and was managed with a shoe raise.



Figure 1: Two operating tables combined to support patient's weight and size.



Figure 2: Image intensifier was reversed to get lateral image.

DISCUSSIONS:

Retrograde nailing is the preferred technique for the treatment of femoral shaft fractures in patients who are obese. In this case multiple challenges were encountered, firstly due to his body weight of 150kg were unable to use a single operating table as the maximum limit of our operating table is 135kg. Therefore, this case was undertaken using 2 operating tables. Secondly, because 2 operating tables had to be used, navigation of fluoroscopy had to be undertaken by reversing the C- arm to obtain lateral images. AP views were undertaken by the conventional method. Obtaining both these images required a lot of movement of the fluoroscopy machine intra- operatively. Thirdly, inserting the distal screws of the retrograde nail at the proximal thigh was most challenging in view of his thick body habitus.

CONCLUSION:

This report provides tips to overcoming challenges of intramedullary nailing in morbidly obese patients which is an increasing trend globally.