Reason and treatment of failure of proximal femoral nail antirotation internal fixation for femoral intertrochanteric fractures of senile patients


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Received May 28, 2013
Accepted October 2, 2013
Published August 7, 2014
DOI http://dx.doi.org/10.4238/2014.August.7.10

ABSTRACT. The cause of postoperative failure after the treatment of femoral intertrochanteric fracture with proximal femoral nail antirotation (PFNA) was analyzed, and the reoperative methods were examined. Nine failures of 308 femoral intertrochanteric fracture patients with PFNA were treated with femoral prosthesis total hip replacement (THR) and reoperative internal fixation. All nine patients were analyzed to determine the cause of failure. The causes of failed internal fixation in the intertrochanteric-fractured patients included perforation of the helical blade into the hip joint in three cases, cutting-out of the helical blade exit outside in two cases, and hip varus as a result of cutting-out the helical blade in two cases. Seven patients with failed internal fixation were treated with THR. Two patients who had femoral shaft fractures at the end of the nail were treated with longer...
PFNA. Faulty operative procedures, unsatisfactory reductions, serious osteoporosis, and incorrect positioning of the helical blade were the most important factors responsible for the failed internal fixation. Satisfactory results were achieved with THR and refixation relative to the causes of the failed internal fixation.

**Key words:** Elderly; Femoral intertrochanteric fracture; Internal fixation; Proximal femoral nail antirotation