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**Fig. 1A-D.** Simple radiograph of 74-year old female. (A) She was diagnosed unstable intertrochanteric fracture of the femur. (B) Postoperative radiograph. (C) Follow up at 2 weeks. Excessive slippage of the lag screw was noted. (D) Radiograph at postoperative 6 weeks. Cut-out of the lag screw was seen.



**Fig. 2A-D.** Simple radiograph of 74-year old female. (A) Initial X-ray shows unstable intertrochanteric fracture of the femur. (B) Postoperative radiograph. (C) Radiograph at postoperative 2 weeks. Excessive slippage of the lag screw was noted. (D) Radiograph at postoperative 6 weeks. Metal failure was not noted.

**Table 1.** Classification of fractures (by Kyle & Gustilo)

Type	Group I	Group II
I	0	0
II	0	0
III	6	6
IV	2	2

**Table 2.** Osteoporosis index (by Singh)

Grade	Group I	Group II
1	2	1
2	4	2
3	2	5
>4	0	0

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**Table 3.** Timing of partial weight bearing after operation (p=0.146, chi-square test)

Timing of partial wt. bearing (weeks)	Group I	Group II
<1	1	0
1~2	4	2
2~4	2	3
>4	1	3

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**Abstract****Fixation Failure of Compression Hip Screw in Unstable Intertrochanteric Fracture of Femur**

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**Purpose:** To evaluate the factor of fixation failure in association of the early controlled weight bearing exercise after using a compression hip screw (CHS) for unstable intertrochanteric fracture of femur in old ages.

**Materials and Methods:** Between May 1998 and February 2002, 8 cases of fixation failure of CHS among the 80 patients were evaluated. We compared gender, age, fracture type with a matched group that fixation failure was not noted. During operation, we performed valgus nailing of compress lag screw and compressed fracture gap with a bolt as soon as possible. The patients were encouraged partial weight bearing 4~5 days after operation and compared immediate postoperative and postoperative 2 weeks x-ray films about degree of slippage or varus angulation of femur.

**Results:** In 5 cases, cut-out of the lag screw were found. In 3 cases, plate fracture and fixation failure were found. Relation between timing of partial weight bearing and fixation failure was not significant ( $p=0.146$ ). But in 5 cases of failure, they continued weight bearing in spite of excessive slippage of the lag screw.

**Conclusion:** Early controlled partial weight bearing exercise after operation of intertrochanteric fracture of the femur were reported good for functional recovery in old ages. But, excessive slippage of the lag screw or varus angulation of proximal femur were found on follow up period, patient teaching and control of ambulation is strongly recommended.

**Key Words:** Femur, Intertrochanteric fracture, Compression hip screw, Fixation failure

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