



Advantages of Telescopic Screw in Slipped Capital Femoral Epiphysis Treatment: A Retrospective Study and Review of the Literature

Children, 2022 – Dr. Alexandru Ulici, et al.

Background:

Slipped capital femoral epiphysis is due to proximal femur physis failure in adolescent patients. Early iatrogenic closure of proximal growth cartilage in children with significant residual growth potential causes complications such as coxa breva, coxa vara, and lower limb length inequalities. The Free-Gliding SCFE Screw System is a self-extending cannulated screw used in Slipped Capital Femoral Epiphysis (SCFE) fixation and femoral neck fractures.

Material and Method:

We conducted a retrospective study on 16 patients. All patients under 11 years old were treated by telescopic cannulated screws fixation. The youngest patient was 7 years old.

Results:

Out of the 22 operated hips, 2 screws have failed, thus resulting in a lack of telescoping of the screw. We discovered an average lengthening of approximately 10 mm at 24 months postoperative check-up in 20 hips in which lengthening took place. According to the Notzli method, none of the patients had an alpha angle value greater than 48 degrees.



FIGURE 1: Male patient, 11 years old at time of surgery, screw telescoped at 36 months follow-up; no length discrepancies noted.

FIGURE 1

Conclusions:

Fixation with telescopic screw for SCFE in patients less than 11 years old, with mild to moderate slippage, **allows the continuous growth and remodeling of the proximal femur, thus avoiding deformities such as coxa breva, coxa vara, FAI, AVN, limb length discrepancies and also allows good range of motion.**