

# HOSPITAL PHYSICIAN®

## ORTHOPAEDIC SURGERY BOARD REVIEW MANUAL

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## Slipped Capital Femoral Epiphysis

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#### I. INTRODUCTION

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- A. Slipped capital femoral epiphysis (SCFE) is a common disorder of the hip among adolescents. The disorder is characterized by posterior, medial, and sometimes inferior displacement of the capital femoral epiphysis on the proximal femoral metaphysis. Extensive displacement results in altered gait and range of motion of the hip and causes premature degenerative arthritis.
- B. Prompt diagnosis is crucial because early treatment can prevent severe displacement and its consequences. Patients often present with misleading symptoms, which may delay diagnosis and result in a less favorable prognosis.
- C. Treatment once had a high complication rate, but improvements in surgical technique, instrumentation, and imaging have made treatment safer and the results more predictable.

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#### II. EPIDEMIOLOGY

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- A. **Incidence.** The incidence of SCFE has been reported to be as low as 0.2 per 100,000 persons per year in eastern Japan and as high as 10.08 per 100,000 persons per year in the United States.<sup>1</sup>
- B. **Sex ratio.** Approximately 2.5 boys have SCFE for each girl affected.
- C. **Age.** Approximately 80% of SCFE cases occur during the adolescent growth phase. The average age at presentation among boys is 13.5 years and among girls is 11.5 years. When a patient younger than 10 years or older than 16 years has SCFE, underlying endocrinopathy such as hypothyroidism or renal osteodystrophy must be excluded as a cause.
- D. **Obesity.** Approximately 50% of patients with SCFE are above the 95th percentile of weight for age.