AAP Journals BLOG

Why Can't We Refer SCFE in a Timely Manner?

January 3, 2017

This article really surprised me. How can we be so tardy in diagnosing slipped capital femoral epiphysis?

Dr. Bud Wiedermann, MD, MA, Evidence eMended Editor, Grand Rounds

Article type: AAP Grand Rounds Blog

This article really surprised me. How can we be so tardy in diagnosing slipped capital femoral epiphysis?

Source: Schur MD, Andras LM, Broom AM, et al. Continuing delay in the diagnosis of slipped capital femoral epiphysis. **J Pediatr. 2016;177:250-254**; doi:10.1016/j.jpeds.2016.06.029. See AAP Grand Rounds commentary by Dr. William Hennrikus (subscription required).

Researchers at 3 high-volume pediatric centers (Children's Hospital Los Angeles, Children's Healthcare of Atlanta, and Boston Children's Hospital) reported dismal findings from a retrospective study from 2003-2012 looking at delays in SCFE diagnosis. Overall, of the 481 patient charts reviewed, the mean, median, and range of diagnosis delays were 17 weeks, 4 weeks, and 0-169 weeks, respectively, with no significant differences over that time period. Less than half the charts had enough detail to determine who first evaluated the patients, but within that group the delays if first seen by an orthopedist were the shortest (mean 0 weeks, range 0 - 0 weeks), followed by primary care providers (4 weeks, 0 - 52 weeks) and then emergency departments (6 weeks, 0 - 104 weeks). Initial presentation with a complaint of knee pain was associated with longer diagnosis delay, not surprisingly. The longer time intervals from first symptom to diagnosis were associated with increased severity, as has been noted in other studies.

I'd love to have seen more details about the delays, such as an analysis of rural versus urban residence of the patient, performance of family practitioners versus pediatricians, and mean wait times for outpatient appointments at the 3 orthopedic centers. The first 2 elements likely weren't available from a retrospective study, but the wait times I would think are easily available in the modern era of customer service in healthcare.

The authors propose what is, to me, a curious recommendation for improving this problem. Noting that patients who had a second diagnosis of SCFE had much shorter delays in diagnosis, they suggest parental education as a means of decreasing delays in first SCFE diagnosis. While I'm all for educating parents, I'm not sure this is a high-yield maneuver for a diagnosis with a prevalence of 10 per 100,000 adolescents, given all the other health issues going on in that population. I'm more with Dr. Hennrikus who suggests renewed emphasis on educating healthcare providers, both PCPs and ED/urgent care clinicians about

recognizing that SCFE must be considered in any adolescent with knee, thigh, or hip pain, especially if obesity is present. Still, that's a tall order, since even a good-sized pediatric practice is likely to have less than 10,000 adolescent patients, and thus may go many years without seeing a SCFE patient.

Further Reading

- Slipped Capital Femoral Epiphysis: Asymptomatic Hip Treatment
- The Limping Child
- Grand Rounds on Facebook
- AAP Journals on Twitter