Swollen Knee: What Does That Mean?

Philip L. Wilson, M.D.

One of the most common injuries we see in our sports medicine practice is an acute knee injury in an active child or teen. Philip L. Wilson, M.D., describes the process of evaluating a swollen knee. With so many possible conditions affecting an otherwise healthy child, the knee evaluation may feel daunting. Using a deliberate process, narrowing down the possible diagnosis and selecting appropriate imaging and referral needs can be straightforward.

What caused the onset of the symptoms?

Ask the patient to describe the onset. Most histories will easily fit into one of these three categories:

- Acute event - easy for the patient to determine how the event happened
- Acute event with chronic history - a clear recent event but a history of underlying symptoms
- No acute event - patient vaguely describes on and off symptoms or chronic complaints

What exactly is a swollen knee?

The effusion caused by an internal derangement of the knee can often cause obvious visible changes in the knee. With a knee effusion (see photo), the fluid is palpable and the contours differ from the contralateral limb.

What other signs and symptoms are common with acute injuries?

With some conversation, athletes will be able to describe the sounds or feeling they experience at the time of an acute injury. These may include twisting, a pop, a click or giving way. They often have some persistent motion abnormality, range of motion limitations or instability.
What conditions need a referral for further care?

REMINDER – always evaluate the hip during a knee exam to rule out a slipped capital femoral epiphysis (SCFE), particularly in 10-14 year old adolescents. Refer same day.

In the full lecture, Wilson reviews knee conditions that should be referred for pediatric orthopedic referral including ACL tears, patellar instability and tibial spine fractures.

Visit our YouTube page to watch the full lecture to learn findings and tests unique to each of these conditions and more. Included in the discussion are videos demonstrating positive findings of special tests as well as tips for completing a virtual knee evaluation.

About the Author
Philip L. Wilson, M.D., is a pediatric orthopedic surgeon at Scottish Rite for Children Orthopedic and Sports Medicine Center in Frisco. He has clinical and research interests in sports medicine including treatment and return to sports in young athletes.