HOW DO I KNOW IF MY PATIENT HAS ARTHRITIS OR A RELATED CONDITION?

To recognize and respond to patterns of symptoms and findings, a pediatric rheumatologist relies heavily on a medical history and physical exam. Imaging (e.g. ultrasound, MRI) is a dependable tool to help rule out other conditions and recognize active inflammation. With a more accurate diagnosis, rheumatologists can use specific disease patterns (rather than labs) to plan the appropriate targeted therapy rather than traditional approaches, which often relied on nontargeted therapies with higher toxicities (e.g., steroids.) In children, arthritis continues to be the number one cause of acquired disability and therefore deserves prudent recognition, classification and proper treatment.

Juvenile arthritis is frequently referred to as juvenile idiopathic arthritis (JIA). Once other causes of arthritis have been excluded, this condition may be diagnosed in individuals less than 16 years of age with a six-week history of arthritis in any one joint.

Key messages when considering JIA in a pediatric assessment:

- If pain is the chief complaint or redness is present, it is less likely that JIA is the diagnosis.
- Signs of systemic inflammation (e.g. fevers, weight loss) should be promptly evaluated to rule out other serious illness.
- Imaging is frequently more accurate and may be more cost effective than lab work.
  - Several labs have false negatives and false positives.
  - Labs will need to be redrawn at the time of treatment.
  - Ultrasound vs MRI is preferred and is ideally read by a pediatric radiologist with musculoskeletal expertise.
- Uveitis may be asymptomatic but is an important finding that should be treated in order to avoid permanent vision loss.

What are activity limitations for children with JIA?

- Children taking Coumadin or those with c-spine involvement should not play contact sports.
- For others, if the activity doesn’t cause pain, no limitations are necessary.
Is there a role for physical therapy or occupational therapy in patients with arthritis?
• For conditions such as scleroderma, reducing the risk of contractures may require focused treatment.
• For most conditions, provided that targeted treatment is successful, there should be less of a need for therapy to maintain mobility.

When prescribing NSAIDS, do you prefer ibuprofen or Naproxen?
• Naproxen is more convenient for families to provide twice daily and therefore may be more likely to be a successful treatment. Otherwise, there is no preference.

How do I know if a joint is actively inflamed and I need to refer?
• Ultrasound, when evaluated by an experienced pediatric musculoskeletal radiologist, can frequently distinguish active inflammation from chronic synovial changes.

What are DMARDS?
• Disease modifying antirheumatic drugs (e.g. methotrexate, sulfasalazine).

Is there a hereditary component to arthritis?
• Though there are some markers showing associations, we have not identified any causes. Clearly, genetics are involved, but it’s just part of the story.

What is enthesitis-related arthritis?
• Enthesitis is inflammation at the tendon or ligament insertion in a bone. Enthesitis-related arthritis is a condition that can present as a single joint complaint that may be initially diagnosed as an apophysitis (e.g. Sever’s disease, Osgood Schlatter’s). Though it is rare, the progression of this condition without proper treatment can result in permanent damage.

Pediatric rheumatology is a very unique and rare subspecialty, and we have five of them on our staff at Texas Scottish Rite Hospital for Children. This team sees patients at our locations in Dallas and Frisco.

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Overview of presentation from a Coffee, Kids and Sports Medicine lecture.

Texas Scottish Rite Hospital for Children is one of the nation’s leading pediatric centers. The hospital treats a wide range of orthopedic conditions, including sports injuries and fractures, as well as certain arthritic, neurological and learning disorders, such as dyslexia. Patients receive treatment regardless of the family’s ability to pay. For more information about services available at our Dallas or Frisco campus, volunteering or donating, visit scottishritehospital.org.