

## **Clinical Decision Making Tools: Finding Better Ways to Diagnose Testicular Torsion**

- Background: Subjective outcome measures (e.g. Testicular Workup for Ischemia & Suspected Torsion (TWIST) Score) are being utilized as a method to prevent delays, but not as standard of care across most institutions. There is currently no clear consensus on a particular clinical decision rubric or pathway to be followed. Traditionally clinical examination/imaging followed by surgical exploration were considered standard but resulted in unnecessary surgeries and increased morbidity and costs (Sheth et al., 2016). A clinical tool such as the TWIST Score, which is a risk scoring system based on signs and symptoms, can be invaluable in the management of patients with acute scrotum and TT because it guides clinical decisions in a timely manner. The purpose of this study is to assess the diagnosis, treatment, and management of testicular torsion.

**Specific Aim 1:** Utilizing the TWIST classification correlate scores to surgical outcome (i.e. orchiectomy vs. salvage rates) and compare clinical recommendations to prior clinical decision making based on the TWIST score.

**Specific Aim 2:** Evaluate interrater reliability, among pediatric urology providers and emergency department (ED) providers, comparing TWIST score assignments in children diagnosed with testicular torsion.