TABLE 1

Differential Diagnosis of Hip Pain in Children

Condition	Age (years)	History	Incidence	Diagnostic examination and tests
Muscle strain (hip flexors, adductors)	> 12	Groin pain after activity, history of trauma or overuse	Common	Tenderness to palpation, pain on manual muscle testing, radiography to rule out fracture
Transient synovitis	3-10	Limping or hip pain following viral illness	Common	Laboratory testing to rule out septic joint, radiography to rule out other injuries, ultrasonography for effusion
Apophyseal avulsion fracture (anterosuperior and anteroinferior iliac spine, ischial tuberosity, iliac crest)	12-25	Painful "pop" (sound or feeling) after sudden forceful movement	Common	Tenderness to palpation, radiography
Apophysitis (anterosuperior and anteroinferior iliac spine, ischial tuberosity, iliac crest)	12-25	Activity-related hip pain, overuse, difficulty bearing weight	Common	Tenderness to palpation, radiography to rule out fracture
Femoral acetabular impingement	> 12	Gradual onset, pain with hip flexion and internal rotation, slipped capital femoral epiphysis or developmental dysplasia of the hip	Less common	Positive FADIR and FABER tests, radiography
Labral tear	> 12	Pain with hip range of motion, mechanical symptoms	Less common	Positive FADIR and FABER tests, MRI
Greater trochanteric pain syndrome (bursitis, gluteus medius tendinopathy or tear, external snapping, iliotibial band friction)	> 12	Pain with sleeping on affected side, activity, or prolonged sitting; overuse	Less common	Tenderness to palpation over the greater trochanter region, positive external derotation test and Ober test, Trendelenburg gait, ultrasonography, MRI, positive FABER test
Stress fracture (femoral neck)	> 12	Progressive pain with activity, recent increase in inactivity level, relative energy deficiency, night pain	Less common	Radiography, MRI
Traumatic fracture (pelvis, proximal femur)	All ages	Pain after a traumatic event, difficulty with weight bearing	Less common	Tenderness to palpation, radiography
Developmental dysplasia	All ages	Vague hip or knee pain, limp with ambulation	Rare	Trendelenburg gait, radiography
Legg-Calvé-Perthes disease	4-9	Vague hip pain, decreased internal rotation of the hip	Rare	Positive FADIR test, radiography, MRI
Slipped capital femoral epiphysis	8-16	Limping, decreased internal rotation of the hip, hip or knee pain	Rare	Positive FADIR test and Drehmann sign, radiography
Infection (septic arthritis, osteomyelitis)	All ages	Fever, limping, hip pain	Rare	Laboratory testing and culture, MRI, joint aspiration
Intra-abdominal or intrapelvic injury or illness (ie, appendicitis)	All ages	Pain associated with urinary or bowel symptoms, cyclic pain associated with menses	Rare	Abdominal or pelvic examination; abdominal imaging as indicated

FABER = flexion, abduction, external rotation; FADIR = flexion, adduction, internal rotation; MRI = magnetic resonance imaging.

Information from references 3, 16, and 17.

Reference(s)