

Revision checklists

History taking

Symptoms

- ☐ Pain
- ☐ Swelling
- ☐ Stiffness
- ☐ Limp
- ☐ Pattern of joint involvement

Evolution

- ☐ Acute or chronic?
- ☐ Associated events
- ☐ Response to treatment

Involvement of other systems

- ☐ Skin, eye, lung or kidney symptoms?
- ☐ Malaise, weight loss, fevers, night sweats?

Impact on patient's lifestyle

- ☐ Patient's needs/aspirations
- ☐ Behavioural changes
- ☐ Impact at school
- ☐ Limitation of activities

Focused questions for the child with a learning disability

- ☐ Regression in motor milestones?
- ☐ Change in behaviour?
- ☐ Subtle adaptations noted to perform activities?
- ☐ Change in gait or shape of fingers?

pGALS screening questions

- ☐ Any pain, swelling or stiffness in muscles, joints or back?
- ☐ Dress completely without any difficulty?
- ☐ Walk up and down stairs without any difficulty?

pGALS screening examination

Gait

- ☐ Observe walking including on tiptoes and heels
- ☐ Observe patient standing: Front, sides and back

Arms

- ☐ Hands in front, palms down, fingers outstretched
- ☐ Backs of hands, make fist
- ☐ Each finger in turn to touch thumb
- ☐ Palpate metacarpophalangeal joints
- ☐ Hands together, then back-to-back
- ☐ Reach up, 'touch the sky', 'look at ceiling'
- ☐ Hands behind neck

Legs

- ☐ Patient lying supine
- ☐ Comment on muscle bulk, leg alignment, symmetry
- ☐ Inspect soles of feet
- ☐ Palpate for an effusion at knee
- ☐ Flex and extend the knee (active and passive)
- ☐ Palpate for crepitus of the knee
- ☐ Internal rotation of hip

Spine

- ☐ Inspect spine: comment on appearance
- ☐ Place ear to shoulder
- ☐ Bend and touch toes
- ☐ Open mouth and place 3 fingers vertically within

pREMS General Principles

Introduction

- ☐ Introduce
- ☐ Explanation
- ☐ Verbal consent
- ☐ Places child at ease
- ☐ Observe for pain

Look

- ☐ Scars, swelling, rashes
- ☐ Muscle wasting
- ☐ Posture, alignment of joints
- ☐ Footwear, walking aids
- ☐ Ensure appropriately exposed

Feel

- ☐ Temperature
- ☐ Swelling
- ☐ Tenderness
- ☐ Crepitus
- ☐ Muscle tone

Move

- ☐ Full range of movement – active and passive
- ☐ 'Copy me' approach
- ☐ Restriction – mild, moderate or severe?

Function

- ☐ Comment on functional assessment of joint

pREMS examination of the hand and wrist

- ☐ Introduce yourself/gain consent to examine
- ☐ Inspect hands (palms and backs) for muscle wasting skin and nail changes
- ☐ Check wrist for carpal tunnel release
- ☐ Feel for radial pulse, tendon thickening and bulk of thenar and hypothenar eminences
- ☐ Assess median, ulnar and radial nerve sensation
- ☐ Assess skin temperature
- ☐ Squeeze MCP joints
- ☐ Bimanually palpate swollen or painful joints, including wrists
- ☐ Look and feel along ulnar border
- ☐ Assess full finger extension and full finger tuck
- ☐ Assess wrist flexion and extension – active and passive
- ☐ Assess median and ulnar nerve power
- ☐ Assess function: grip and pinch, picking up small object
- ☐ Perform Tinel's test (if suggestion of carpal tunnel syndrome)
- ☐ Special tests: nailfold capillaroscopy, hypermobility assessment

pREMS examination of the elbow

- ☐ Introduce yourself/gain consent to examine
- ☐ Look for scars, swellings or rashes
- ☐ Assess skin temperature
- ☐ Palpate over head of radius, joint line, medial and lateral epicondyles
- ☐ Assess full flexion and extension, pronation and supination – actively and passively
- ☐ Assess function – e.g. hand to nose or mouth
- ☐ Special tests: muscle power, peripheral nerves, peripheral pulses, hypermobility, entheses

pREMS Examination of the shoulder

- ☐ Introduce yourself/gain consent to examine
- ☐ Inspect shoulders from in front, from the side and from behind
- ☐ Assess skin temperature
- ☐ Palpate bony landmarks and surrounding muscles
- ☐ Assess movement and function: hands behind head, hands behind back
- ☐ Assess (actively and passively) external rotation, flexion, extension and abduction
- ☐ Observe scapular movement
- ☐ Special tests: muscle power, peripheral nerves, peripheral pulses, hypermobility

pREMS examination of the hip

- ☐ Introduce yourself/gain consent to examine

With the patient lying on couch:

- ☐ Look for flexion deformity and leg length disparity
- ☐ Check for scars
- ☐ Feel the greater trochanter for tenderness
- ☐ Assess full hip flexion, internal and external rotation
- ☐ Perform the Thomas test
- ☐ Measure leg length
- ☐ Special tests: Gowers's test, entheses, muscle power, hypermobility

With the patient standing:

- ☐ Look for gluteal muscle bulk
- ☐ Measure thigh girth
- ☐ Perform the Trendelenburg test
- ☐ Assess the patient's gait

pREMS examination of the knee

- ☐ Introduce yourself/gain consent to examine

With the patient lying on couch:

- ☐ Look from the end of the couch for varus/valgus deformity, muscle wasting, scars and swellings
- ☐ Look from the side for fixed flexion deformity
- ☐ Assess skin temperature
- ☐ With the knee slightly flexed palpate the joint line and the borders of the patella
- ☐ Feel the popliteal fossa
- ☐ Perform a patellar tap and cross fluctuation (bulge sign)
- ☐ Assess full flexion and extension (actively and passively)
- ☐ Assess stability of knee ligaments medial and lateral collateral – and perform anterior draw test
- ☐ Measure leg length, thigh girth
- ☐ Special tests: Clarke's test, patellar tracking, thigh-foot angle, hamstring and iliotibial tightness, knock-knee/bow-leg assessment, hypermobility

With the patient standing:

- ☐ Look again for varus/valgus deformity and popliteal swellings
- ☐ Assess the patient's gait

pREMS examination of the foot and ankle

- ☐ Introduce yourself/gain consent to examine

With the patient lying on couch:

- ☐ Look at dorsal and plantar surfaces of the foot
- ☐ Assess skin temperature
- ☐ Palpate for peripheral pulses
- ☐ Squeeze the MTP joints
- ☐ Palpate the midfoot, ankle joint line and subtalar joint
- ☐ Assess movement (actively and passively) at the subtalar joint (inversion and eversion), the big toe (dorsi- and plantar flexion), the ankle joint (dorsi- and plantar flexion) and mid-tarsal joints (passive rotation)
- ☐ Look at the patient's footwear
- ☐ Measure leg length
- ☐ Special tests: thigh-foot angle, hypermobility, entheses, muscle power, nailfold capillaroscopy

With the patient standing:

- ☐ Look at the forefoot, midfoot (foot arch) and the hindfoot
- ☐ Assess the gait cycle (heel strike, stance, toe-off)

pREMS examination of the spine

- ☐ Introduce yourself/gain consent to examine

With the patient standing:

- ☐ Inspect from the side and from behind
- ☐ Palpate the spinal processes and paraspinal muscles
- ☐ Assess movement: lumbar flexion and extension and lateral flexion; cervical flexion, extension, rotation and lateral flexion
- ☐ Special tests: one-leg standing spine extension test

With the patient sitting on couch:

- ☐ Assess thoracic rotation

With the patient lying on couch:

- ☐ Perform straight leg raising and dorsiflexion of the big toe
- ☐ Assess limb reflexes

Examination tips for children with a learning disability, especially Down's syndrome

- ☐ Be opportunistic – observe child move around the room and in play
- ☐ DA most commonly affects the small joints of the hands and wrists. Start with these joints if the child is not likely to tolerate a full examination
- ☐ Compare sides, as it may be difficult to appreciate joint restriction in a child with joint hypermobility